

Notice of Meeting and Meeting Agenda Environmental Services Committee

Wednesday, February 7, 2018

1:30 PM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

J. Brownoff (Chair), D. Blackwell (Vice Chair), R. Atwell, B. Desjardins, C. Hamilton, L. Helps,
M. Hicks, N. Jensen, D. Murdock, J. Ranns, S. Price (Board Chair, ex-officio)

1. Approval of Agenda

2. Adoption of Minutes

2.1. [18-065](#) Minutes of the January 10, 2018 Environmental Services Committee Meeting

Recommendation: That the minutes of the January 10, 2018 Environmental Services Committee meeting be adopted as circulated.

Attachments: [Minutes](#)

3. Chair's Remarks

4. Presentations/Delegations

5. Committee Business

5.1. [18-053](#) 2018 Board Standing and Select Committees - Terms of Reference (Environmental Services Committee)

Recommendation: That the Environmental Services Committee recommend to the Capital Regional District Board:

That the Terms of Reference for the 2018 Environmental Services Committee, as attached in Appendix A, be approved.

Attachments: [Staff Report: Terms of Reference ESC](#)
[Appendix A: 2018 Terms of Reference ESC](#)

5.2. [18-049](#) Continued Participation in Curbside Recycling Services

Recommendation: That the Environmental Services Committee recommend to the Board that staff be directed to:

1. enter into an agreement with Recycle BC to provide residential curbside recycling services for the capital region on its behalf beginning May 1, 2019 and ending April 30, 2023
2. subject to the execution of an agreement with Recycle BC, issue a tender for Board approval for curbside collection contract for four years and eight months, from May 1, 2019 to December 31, 2023.

Attachments: [Staff Report: Continued Participation in Curbside Recycling Services](#)

5.3. [18-048](#) Continued Participation in Electoral Area Depot Recycling Services

Recommendation: That the Environmental Services Committee recommend to the Board that:

1. staff be directed to prepare an agreement with Recycle BC to provide residential packaging and printed paper depot collection services in the Electoral Areas on its behalf beginning May 1, 2019 and ending December 31, 2023; and
2. subject to the execution of an agreement with Recycle BC, that agreements with Electoral Area depot operators be prepared for the provision of collection services; and
3. the funding shortfall for the collection services be drawn from the 2019 and subsequent Environmental Resource Management budgets.

Attachments: [Staff Report: Continued Participation in EA Depot Recycling Svcs](#)
[Appendix A: EA Depot Pkg'g and Printed Paper Collection Cost Data](#)

5.4. [18-052](#) Recycling Markets Update

Recommendation: That the Environmental Services Committee recommend to the Board that this update be received for information.

Attachments: [Staff Report: Recycling Markets Update February 7, 2018](#)
[Appendix A: Changing Markets for Canada's Recyclable Markets](#)

5.5. [18-043](#) 2017 CRD Energy Step Code Program Update

Recommendation: That the Environmental Services Committee recommend to the Capital Regional District Board:
That this report be forwarded to municipal councils, the Electoral Area Services Committee and the Planning and Protective Services Committee for information.

Attachments: [Staff Report: 2017 CRD Energy Step Code Program Update](#)
[Appendix A: 2017 CRD Energy Step Code Program Activities and Key Findings](#)
[Appendix B: Fall 2017 Capital Region Building Industry Engagement Summary](#)
[Appendix C: Project Report: CRD BC Energy Step Code Education Program](#)
[Appendix D: Correspondence](#)
[Presentation: 2017 CRD Energy Step Code Program Update](#)

6. New Business

7. Motion to Close the Meeting

7.1. [18-076](#) Motion to Close the Meeting

Recommendation: That the meeting be closed in accordance with the Community Charter, Part 4, Division 3, 90(1)(a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the regional district or another position appointed by the regional district.

8. Adjournment

Next Meeting: March 7, 2018

To ensure quorum, please advise Pat Perna (pperna@crd.bc.ca) if you or your alternate CANNOT attend.

Meeting Minutes

Environmental Services Committee

Wednesday, January 10, 2018

11:00 AM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

PRESENT:

Directors: J. Brownoff (Chair), D. Blackwell (Vice Chair), R. Atwell, B. Desjardins, C. Hamilton, L. Helps, M. Hicks, N. Jensen, D. Murdock, J. Ranns, S. Price (Board Chair, ex-officio)
Staff: R. Lapham, Chief Administrative Officer; T. Robbins, General Manager, Integrated Water Services; G. Harris, Senior Manager, Environmental Protection; R. Smith, Senior Manager, Environmental Resource Management; E. Gorman, Deputy Corporate Officer; P. Perna, Committee Clerk (Recorder)
Others: Director Windsor

The meeting was called to order at 11:01 am.

1. Approval of Agenda

**MOVED by Director Blackwell, SECONDED by Director Helps,
That the agenda for the January 10, 2018 Environmental Services Committee
meeting be approved as circulated.
CARRIED**

2. Adoption of Minutes

2.1. [18-005](#) Minutes of the October 25, 2017 Environmental Services Committee Meeting

**MOVED by Director Blackwell, SECONDED by Director Helps,
That the minutes of the October 25, 2017 Environmental Services Committee
meeting be adopted as circulated.
CARRIED**

3. Chair's Remarks

The Chair remarked on recent meetings and current projects as follows:

- a First Nations Tour of Hartland on December 18th, which included topics on Hartland operations, environmental controls, Integrated Resource Management and the Residual Treatment Facility being constructed at Hartland North
- membership recruitment for the Solid Waste Advisory Committee
- continuing to raise awareness among homeowners throughout the region on how to properly dispose of renovation waste materials through the Hartland Clean Demo Waste Campaign

4. Presentations/Delegations - None.

5. Committee Business

5.1. [18-022](#) Integrated Resource Management - Next Steps

R. Smith provided an overview of the report and spoke to a slide presentation.

Discussion ensued on the following:

- concern for dropping the Integrated Resource Management process
- composting concerns at Hartland landfill in regards to odour and making changes to the composting procedure
- addressing sludge in a cost-effective way
- moisture percentage and use in the dry biosolids end product

Directors Ranns, Desjardins, and Jensen left at 11:40 am

Director Atwell spoke to a video presentation on Integrated Resource Management Technology and the process sludge goes through to get to dry biosolids.

S. Price left at 11:46 am

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

That the CRD modify the Integrated Resource Management (IRM) work plan by:

1. Concluding the current IRM procurement process
2. Issuing a Request for Proposals for the beneficial use of dried Class A biosolids produced by the Residuals Treatment Facility as a stand-alone procurement, according to the CRD's land application policy
3. Pursuing an in-region organics (kitchen scraps/yard and garden) processing facility by initiating a new procurement process for a facility to be located at Hartland landfill
4. Informing the Project Board of the new direction and requesting that any Core Area Wastewater Treatment project implications be included in the upcoming update report to the Core Area Liquid Waste Management Committee in February; and
5. Submitting a revised project plan for the beneficial use of biosolids and the IRM initiative to the province

MOVED by Director Ranns, **SECONDED** by Director Desjardins,
That the Integrated Resource Management - Next Steps report be referred back to the next Environmental Services Committee for further discussion.

DEFEATED

OPPOSED: Board Chair Price, Directors Blackwell, Brownoff, Helps, Jensen, and Murdock

The question was called on the main motion, which was considered individually in numerical order.

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

1. That the CRD modify the Integrated Resource Management (IRM) work plan by

concluding the current IRM procurement process.

CARRIED

OPPOSED: Directors Atwell, Hicks, and Hamilton

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

2. That the CRD modify the Integrated Resource Management (IRM) work plan by issuing a Request for Proposals for the beneficial use of dried Class A biosolids produced by the Residuals Treatment Facility as a stand-alone procurement, according to the CRD's land application policy

CARRIED

OPPOSED: Directors Atwell and Hamilton

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

3. That the CRD modify the Integrated Resource Management (IRM) work plan by pursuing an in-region or near in-region organics (kitchen scraps/yard and garden) processing facility by initiating a new procurement process.

CARRIED

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

4. That the CRD modify the Integrated Resource Management (IRM) work plan by informing the Project Board of the new direction and requesting that any Core Area Wastewater Treatment project implications be included in the upcoming update report to the Core Area Liquid Waste Management Committee in February; and

CARRIED

OPPOSED: Director Atwell

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District (CRD) Board:

5. That the CRD modify the Integrated Resource Management (IRM) work plan by submitting a revised project plan for the beneficial use of biosolids and the IRM initiative to the province

CARRIED

OPPOSED: Director Atwell

5.2. [18-020](#)

Abandoned Boats and Marine Debris - Disposal Strategy

G. Harris provided an overview of the report.

Discussion ensued on the type of materials accepted.

MOVED by Director Blackwell, **SECONDED** by Director Hamilton,
That the Environmental Services Committee recommend to the Capital Regional District Board:

That this staff report be received for information.

CARRIED

5.3. [18-021](#) Sewer Use Bylaw No. 2922 - Amendment

G. Harris provided an overview of the report and the bylaws.

**MOVED by Director Blackwell, SECONDED by Director Helps,
That the Environmental Services Committee recommend to the Capital Regional
District Board:**

1. That Bylaw No. 4221, "Capital Regional District Sewer Use Bylaw No. 5, 2001, Amendment Bylaw No. 6, 2018" be introduced and read a first and second time.
2. That Bylaw No. 4221 be read a third time.
3. That Bylaw No. 4221 be adopted.
4. That Bylaw No. 4220, "Capital Regional District Ticket Information Authorization Bylaw 1990, Amendment Bylaw No. 62, 2018 be introduced and read a first and second time.
5. That Bylaw No. 4220 be read a third time.
6. That Bylaw No. 4220 be adopted.

CARRIED

6. Motion with Notice

6.1. [18-006](#) Motion with Notice - Integrated Resource Management Procurement and Biosolids (Director Helps)

**MOVED by Director Blackwell, SECONDED by Director Helps,
That the Environmental Services Committee receive the Motion with Notion -
Integrated Resource Management Procurement and Biosolids for information.
CARRIED**

7. Correspondence

7.1. [18-024](#) Correspondence: Letter from District of Central Saanich to Environmental Services Committee Chair re Derelict and Abandoned Vessels (October 23, 2017)

R. Lapham provided an overview of the correspondence.

Director Windsor spoke to the correspondence.

Discussion ensued on the following:

- Willis Point residents' concerns until more information is brought forward from the District of Central Saanich
- the need to see the plan before supporting the application and being able to participate in the plan
- the plan with maps and moorage points are now available on the District of Central Saanich's website
- addressing challenges as they come forward

**MOVED by Director Helps, SECONDED by Director Blackwell,
That the Environmental Services Committee receive the item of correspondence
from the District of Central Saanich dated October 23, 2017 and recommend to
the Capital Regional District Board:
That the Capital Regional District Board endorse the District of Central Saanich's**

initiatives to:

- (a) apply to the Province for a license of occupation over the water of Brentwood Bay for the purpose of managing vessel moorage; and
- (b) apply to have Brentwood Bay declared a Designated Sewage Area for the purpose of managing sewage discharges from vessels.

MOVED by Director Helps, SECONDED by Director Blackwell,
 That the recommendation be amended to add an item (c) the Capital Regional District Board request that the District of Central Saanich engage nearby residents before finalizing the plan.

CARRIED

OPPOSED: Directors Hicks and Atwell

MOVED by Director Helps, SECONDED by Director Blackwell,
 That the Environmental Services Committee receive the item of correspondence from the District of Central Saanich dated October 23, 2017 and recommend to the Capital Regional District Board:

That the Capital Regional District Board endorse the District of Central Saanich's initiatives to:

- (a) apply to the Province for a license of occupation over the water of Brentwood Bay for the purpose of managing vessel moorage;
- (b) apply to have Brentwood Bay declared a Designated Sewage Area for the purpose of managing sewage discharges from vessels; and
- (c) the Capital Regional District Board request that the District of Central Saanich engage nearby residents before finalizing the plan.

CARRIED

OPPOSED: Directors Hicks and Atwell

8. New Business

8.1. [17-900](#) Integrated Resource Management - Key Procurement Criteria

R. Lapham provided an overview of the recommendation.

MOVED by Director Helps, SECONDED by Director Blackwell,
 That the Environmental Services Committee recommend to the Capital Regional District Board:

That staff be directed to gather data, if any is available, on what biochar, that is produced using biosolids, may contain in terms of risks to land application.

CARRIED

9. Adjournment

MOVED by Director Helps, SECONDED by Director Murdock,
 That the January 10, 2018 Environmental Services Committee meeting be adjourned at 12:12 pm.

CARRIED

Chair

Recorder



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 7, 2018**

SUBJECT 2018 Board Standing and Select Committees – Terms of Reference

ISSUE

To establish the terms of reference for the 2018 Board Standing and Select Committees.

BACKGROUND

Terms of Reference (TOR) serve to clarify the mandate, responsibilities and procedures governing committees and provide a point of reference and guidance for the committees and their members. This year, the TOR are being considered by each committee and will be forwarded to the Board for approval.

Under the *Local Government Act* and the CRD Board Procedures Bylaw, the CRD Board Chair has the authority to establish Standing Committees and appoint members. The CRD Board has the authority to establish Select Committees and the authority to establish Advisory Committees to provide advice and recommendations to the Board or a Board Standing Committee.

The 2018 committee structure remains largely the same as in 2017. The 2018 TOR have been updated to reflect the Committee will be responsible for regional invasive species management and coordination, and to update the name of the support department in section 5 to Corporate Services. Removed from the TOR are responsibilities for the Roundtable on the Environment and the Juan de Fuca Stormwater service.

ALTERNATIVES

Alternative 1:

That the Environmental Services Committee recommend that the 2018 Terms of Reference, as attached in Appendix A, be approved.

Alternative 2:

That the terms of reference be referred back to staff for further review.

IMPLICATIONS

The TOR that have been developed for each committee identify the mandate or purpose of the committee, its establishment and authority, composition, procedures and staff resources. Committees are generally structured around specific service areas. Where applicable, other committees that report through each of the committees have been identified. The 2018 committee structure is largely unchanged from 2017. The only governance amendments recommended are those required to bring the Terms of Reference in line with current ongoing initiatives and organizational structure as identified.

Next Steps

Following the confirmation by each Committee of their TOR and approval by the CRD Board, the TOR will be posted to the CRD website.

RECOMMENDATION

That the Environmental Services Committee recommend to the Capital Regional District Board:

That the Terms of Reference for the 2018 Environmental Services Committee, as attached in Appendix A, be approved.

Submitted by:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

LH:cl

Attachment: Appendix A – Terms of Reference – Environmental Services Committee

Terms of Reference

The logo for the Capital Regional District (CRD) is located in the top right corner of the header banner. It consists of the letters 'CRD' in a stylized, white, sans-serif font, set against a dark grey background that is part of a larger graphic element resembling a wave or a stylized landscape.

ENVIRONMENTAL SERVICES COMMITTEE

PREAMBLE

The Capital Regional District (CRD) Environmental Services Committee is a standing committee established by the CRD Board and will oversee and make recommendations to the Board regarding waste management, resource recovery, climate change and other environmental matters.

The Committee's official name is to be:

Environmental Services Committee

1.0 PURPOSE

The mandate of the Committee includes overseeing and making recommendations to the Board regarding the following functions:

- Policy matters pertaining to liquid and solid waste management, i.e. beneficial use of biosolids, regional source control and energy recovery from sewage, treated effluent and solid waste
- Regional solid waste function
- Waste diversion and recycling programs
- Hartland operations
- Resource recovery opportunities
- Stormwater quality function for the core area and Sooke, and the Southern Gulf Islands and Salt Spring Island
- Climate Action Strategy & Program – policy, community initiatives and public outreach
- Millstream Meadows Remediation
- Environmental and sustainability matters
- Integrated watershed management planning – community initiatives and public outreach
- Preservation and/or restoration of biodiversity and ecosystem health
- Invasive species management and coordination

The Committee may also make recommendations to the Board to advocate to senior levels of government for programs and regulations to reduce emissions and/or prepare for climate change.

The Committee will also:

- serve as the Plan Monitoring Advisory Committee for the current Solid Waste Management Plan (SWMP)
- stand as the Steering committee for the revised SWMP

The following committees will report through the Environmental Services Committee:

- Climate Action Inter-Municipal Task Force
- Integrated Solid Waste and Resource Management Plan Public and Technical Advisory Committee (PTAC)
- Integrated Resource Management Advisory Committee

2.0 ESTABLISHMENT AND AUTHORITY

- The committee will make recommendations to the Board for consideration; and
- The Board Chair will appoint the Committee Chair, Vice Chair and committee members.

3.0 COMPOSITION

- The Chair, Vice Chairs and members are appointed annually by the Board Chair.
- All Board members are permitted to participate in standing committee meetings, but not vote, where an item of local significance is on the agenda (Board resolution Nov. 12, 2014).

4.0 PROCEDURES

- The committee shall meet on a monthly basis, except August and December, and have special meetings as required;
- The agenda will be finalized in consultation between staff and the Committee Chair and any committee member may make a request to the Chair to place a matter on the agenda;
- With the approval of the Committee Chair and the Board Chair, committee matters of an urgent or time sensitive nature may be forwarded directly to the Board for consideration; and
- A quorum is a majority of the committee membership and is required to conduct committee business.

5.0 RESOURCES AND SUPPORT

- The General Manager Parks & Environmental Services will act as liaison to the committee; and
- Minutes and agendas are prepared and distributed by the Corporate Services Department.

*Approved by the Environmental Services Committee on _____, 2018
Approved by the CRD Board on _____, 2018*



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 7, 2018**

SUBJECT **Continued Participation in Curbside Recycling Services**

ISSUE

To seek direction with respect to the Capital Regional District's continued involvement with curbside recycling services beyond April 30, 2019.

BACKGROUND

Formerly known as Multi Material BC, Recycle BC (RBC) has been responsible for the management of residential packaging and printed papers (PPP) throughout the province of BC, including all materials collected through the curbside blue box program, since May of 2014. It was at that time that an amendment to the *BC Recycling Regulation* (BCRR) came into force requiring PPP to assume this responsibility and RBC was formed by the affected producers as a not-for-profit stewardship agency in response to this requirement.

At its meeting of July 9, 2014 the CRD Board passed a motion directing staff to enter into an agreement with RBC to provide residential curbside recycling services on its behalf for the capital region beginning May 1, 2015 and ending April 30, 2019. The CRD Board also approved a subsequent motion directing that, subject to the successful execution of an agreement with RBC, a four year blue box collection contract be awarded to Emterra Environmental.

Both the agreement with RBC and the contract with Emterra are due to expire in approximately 15 months and a decision needs to be made with regard to whether the CRD wishes to enter into a new agreement with RBC to continue providing curbside recycling services on its behalf. RBC has proposed entering into a new agreement that would commence May 1, 2019 and expire on December 31, 2023 using essentially the same terms and conditions that are in place under the current contract. Should the CRD elect not to enter into a new agreement with RBC to continue providing curbside recycling services it would need to advise RBC in writing of its intentions no less than six months prior to the expiration of the current agreement. Under the BCRR, RBC would be required to instead directly implement its own residential curbside recycling service for all homes that currently receive such service.

Should the CRD elect to continue providing curbside recycling services on behalf of RBC beyond April 30, 2019, a collection contract would need to be tendered and awarded no less than nine months in advance of the start of the work in order to allow sufficient time for collection trucks to be ordered, manufactured and delivered.

ALTERNATIVES

That the Environmental Services Committee recommend to the Board that:

Alternative 1

Staff be directed to:

1. enter into an agreement with Recycle BC to provide residential curbside recycling services for the capital region on its behalf beginning May 1, 2019 and ending April 30, 2023

2. subject to the execution of an agreement with Recycle BC, issue a tender for Board approval for curbside collection contract for four years and eight months, from May 1, 2019 to December 31, 2023.

Alternative 2

Staff be directed to serve written notice to Recycle BC that the CRD does not wish to enter into a new agreement to provide residential curbside recycling services for the capital region on its behalf beyond April 30, 2019 when the current agreement expires.

SOCIAL IMPLICATIONS

Alternative 1 would see curbside recycling continue with the CRD being accountable for this valued service within the community. This would allow for services designed for local needs to be maintained, such as door pick-up for elderly and/or disabled residents. It would also provide continuity of service and allow the synergistic benefits of cross promotion with other waste diversion initiatives and environmental programs to be maintained. It would also allow for program promotion and messaging to be developed specifically for the region's demographics and delivered to best meet the needs of the local community.

Under Alternative 2 the provision of curbside recycling services would become the responsibility of RBC. RBC would be obligated to continue providing this service and they would contract private industry to do so. However, returning responsibility for this service to RBC may result in a reduction in service levels, including the discontinuation of curbside glass collection. Without CRD involvement residents will need to rely on RBC generic province-wide hotline and website services, rather than those currently provided by the CRD to serve this community specifically. It is also likely to result in confusion amongst residents while service is transitioned from the CRD to RBC.

ENVIRONMENTAL IMPLICATIONS

Alternative 1 would see the current residential curbside recycling services maintained in the region. Returning direct responsibility for curbside recycling to RBC under Alternative 2 may result in a reduction in service levels, including the discontinuation of curbside glass collection, as RBC is required to discharge its regulatory responsibility and not required to provide service levels beyond what is mandated under the BC Recycling Regulation. This may result in some recyclable materials being landfilled as some residents may choose to dispose their materials as they become less convenient to recycle.

ECONOMIC IMPLICATIONS

The new RBC agreement posed under Alternative 1 would use the following payment structure:

Payment Type	Current RBC Agreement		Proposed RBC Agreement		Change	% Change
	Current Annual Per Household Rate	Current Total Annual Payment	Proposed Annual Per Household Rate	Proposed Total Annual Payment		
Curbside Collection	\$37.00	\$4,510,004	\$40.65	\$4,954,910	\$444,906	10%
Education Funding	\$0.75	\$91,419	\$0.75	\$91,419	\$0	0%
Administration Funding	\$2.50	\$304,730	\$1.10	\$134,081	-\$170,649	-56%
Total	\$40.25	\$4,906,153	\$42.50	\$5,180,410	\$274,257	

With fees having remained static for four years, the proposed 10% increase in the curbside collection fee rate represents an average 2.5% inflation adjustment per year for the current four year agreement. The proposed new agreement currently does not contain any provisions for inflationary adjustments and staff have suggested to RBC that an annual adjustment be included. RBC is proposing to reduce the administration fee because it has reduced its reporting requirements and it believes that there would therefore be a lower administrative burden.

The curbside collection fees paid to the CRD under the current agreement with RBC are sufficient to cover 99% of Emterra’s collection contract costs. RBC funding is slightly less than complete due to the Board’s direction in 2014 that curbside glass collection be maintained as a public convenience despite RBC’s preference for having it discontinued (to reduce cross contamination with other recyclables) in favour of glass collection at depots only.

Costs under a new collection contract would be subject to a competitive tendering process but would be expected to closely align with the per household compensation rates paid by RBC to the CRD as these rates are known widely amongst the collection industry.

CONCLUSION

Recycle BC and the CRD have worked together successfully since May of 2014 to provide residential curbside recycling services in the capital region. Recycle BC is proposing to continue this mutually beneficial relationship through a new service agreement that would be in effect from May 1, 2019 to December 31, 2023 that would see current service and support programs maintained for the region’s residents. Collection contract costs would be subject to a competitive tendering process but would be expected to closely align with the per household compensation rates paid by RBC.

RECOMMENDATION

That the Environmental Services Committee recommend to the Board that staff be directed to:

1. enter into an agreement with Recycle BC to provide residential curbside recycling services for the capital region on its behalf beginning May 1, 2019 and ending April 30, 2023
2. subject to the execution of an agreement with Recycle BC, issue a tender for Board approval for curbside collection contract for four years and eight months, from May 1, 2019 to December 31, 2023.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

TW:ac



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 7, 2018**

SUBJECT **Continued Participation in Electoral Area Depot Recycling Services**

ISSUE

To seek direction with respect to the Capital Regional District's continued involvement with depot recycling services in Electoral Areas beyond April 30, 2019.

BACKGROUND

Formerly known as Multi Material BC, Recycle BC (RBC) has been responsible since May of 2014 for the management of residential packaging and printed papers (PPP) throughout the province of BC, including PPP materials collected in electoral areas at depots in lieu of curbside blue box service. It was at this time that an amendment to the *BC Recycling Regulation* (BCRR) came into force requiring PPP producers to assume this responsibility and RBC was formed by the affected producers as a not-for-profit stewardship agency in response to this requirement.

At its March 11, 2015 meeting, the CRD Board passed a motion directing staff to negotiate agreements with RBC and the Electoral Area depot operators to provide residential PPP depot service beginning May 1, 2015 and ending April 30, 2019 and for the CRD to cover any funding shortfall. Since execution of the May 2015 agreements, CRD staff have continued to work with depot operators to consider adjustments to service levels and a reduction of funding reliance. The resulting 2019 budgets developed by the electoral area depots show a slight decrease in depot reliance on CRD funding.

Both the agreement with RBC and contracts with the depot operators are due to expire in approximately 15 months and a decision needs to be made with regard to whether the CRD wishes to enter into new agreements with RBC and the depot operators to continue providing depot recycling services. After reviewing their current depot funding model, and consulting with depot service providers, RBC has proposed entering into a new agreement for depot collection services that would commence May 1, 2019 and expire on December 31, 2023 using essentially the same terms and conditions that are in place under the current contract, with the exception that they are proposing to increase the \$175 per tonne fees paid for film plastic and foamed polystyrene to \$500 and \$600 per tonne respectively.

Should the CRD elect not to enter into a new agreement with RBC to continue providing Electoral Area PPP depot collection services it would need to advise RBC in writing of its intentions no less than six months prior to the expiration of the current agreement. Under the BCRR, RBC would be required to instead directly implement its own residential PPP recycling service for those areas. In discussion with RBC, they have advised it is likely that depot recycling service would be disrupted as the work is retendered by RBC and it is probable that service levels would be reduced or, on the smaller islands, discontinue entirely.

Should the CRD elect to continue providing PPP depot collection services in Electoral Areas on behalf of RBC beyond April 30, 2019, new contracts with the depots on the five Gulf Islands would need to be prepared.

ALTERNATIVES

That the Environmental Services Committee recommend to the CRD Board that:

Alternative 1

1. staff be directed to prepare an agreement with Recycle BC to provide residential packaging and printed paper depot collection services in the Electoral Areas on its behalf beginning May 1, 2019 and ending December 31, 2023; and
2. subject to the execution of an agreement with Recycle BC, that agreements with Electoral Area depot operators be prepared for the provision of collection services; and
3. the funding shortfall for the collection services be drawn from the 2019 and subsequent Environmental Resource Management budgets.

Alternative 2

Staff be directed to serve written notice to Recycle BC that the CRD does not wish to enter into a new agreement to provide residential packaging and printed paper depot collection services for in the Electoral Areas on its behalf beyond April 30, 2019 when the current agreement expires.

SOCIAL IMPLICATIONS

The Gulf Island recycling depots typically began as community initiatives by volunteers over many years, with the CRD covering operational expenses and capital costs for infrastructure. Over time these depots grew and now collect an array of recyclable materials in addition to PPP and offer a variety of reuse waste reduction alternatives as well.

Alternative 1 will maintain the status quo for service in these communities. Returning responsibility for PPP collection in Electoral Areas to RBC under Alternative 2 will likely result in service level reductions and/or disruptions which would not meet service expectations in the affected communities. Some of the depots may face outright closure. These changes would also impact seasonal visitors to these communities who make use of the island recycling depots.

ENVIRONMENTAL IMPLICATIONS

Alternative 1 will ensure that recycling programs and the associated positive environmental outcomes are maintained. Returning direct responsibility for PPP depot collection in Electoral Areas to RBC under Alternative 3 will likely result in service level reductions or, on the smaller islands, a discontinuation of on island collection. This is due to the fact that RBC is committed to discharging its regulatory responsibility only and not to provide service levels beyond what is mandated.

ECONOMIC IMPLICATIONS

In 2017, the net cost to the CRD to provide Electoral Area depot collection services was \$432,859 as outlined in Appendix A. For Alternative 1, estimated costs and revenues for 2019 are also provided in Appendix A using the increased RBC rates for film and polystyrene collection. Alternative 2 would pose no cost to the CRD.

CONCLUSION

Recycle BC and the CRD have worked together successfully since May of 2014 to provide residential depot recycling services in the capital region. Recycle BC is proposing to continue this mutually beneficial relationship through a new service agreement that would be in effect from May 1, 2019 to December 31, 2023 and that would see depot collection of residential PPP in Electoral Areas maintained.

RECOMMENDATIONS

That the Environmental Services Committee recommend to the Board that:

1. staff be directed to prepare an agreement with Recycle BC to provide residential packaging and printed paper depot collection services in the Electoral Areas on its behalf beginning May 1, 2019 and ending December 31, 2023; and
2. subject to the execution of an agreement with Recycle BC, that agreements with Electoral Area depot operators be prepared for the provision of collection services; and
3. the funding shortfall for the collection services be drawn from the 2019 and subsequent Environmental Resource Management budgets.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

TW:ac

Attachment: Appendix A – Electoral Area Depot Packaging and Printed Paper Collection Cost Data

**ELECTORAL AREA DEPOT PACKAGING AND PRINTED PAPER
COLLECTION COST DATA**

2017 COSTS AND REVENUES				
Depot	Payments From RBC	CRD Payments to Depot	Net Cost to CRD	Percent Funded by RBC
Salt Spring Island	\$59,975	\$246,036	\$186,061	24%
Pender Island	\$15,925	\$88,204	\$72,278	18%
Mayne Island	\$13,270	\$71,948	\$58,679	18%
Galiano Island	\$11,189	\$95,911	\$84,722	12%
Saturna Island	\$2,099	\$20,329	\$18,229	10%
Port Renfrew	\$2,111	\$15,000	\$12,889	14%
TOTAL	\$104,569	\$537,428	\$432,859	19%

2019 PROJECTED COSTS AND REVENUES				
Depot	Estimated Payments From RBC¹	CRD Payments to Depot²	Net Cost to CRD	Percent Funded by RBC
Salt Spring Island	\$69,394	\$250,981	\$181,587	28%
Pender Island	\$17,722	\$89,977	\$72,254	20%
Mayne Island	\$14,679	\$73,395	\$58,716	20%
Galiano Island	\$12,620	\$97,839	\$85,218	13%
Saturna Island	\$2,406	\$20,737	\$18,332	12%
Port Renfrew ³	\$2,196	\$15,000	\$12,804	15%
TOTAL	\$119,017	\$547,929	\$428,912	22%

¹ Based on 2017 quantities of recyclable materials received and proposed 2019 Recycle BC rates.

² Includes a 1.5% inflationary adjustments on May 1, 2018 and May 1, 2019.

³ The 2018 Port Renfrew budget does not include an inflationary adjustment to the \$15,000 recycling depot payment.



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 7, 2018**

SUBJECT **Recycling Markets Update**

ISSUE

To provide the Committee with an update on the impact of changing recycling markets at Hartland landfill.

BACKGROUND

China has been the principal end market for the majority of North American post-consumer plastics, paper and other recyclable materials for many years. However, in July 2017 China announced plans to severely restrict the importation of recyclable materials from outside sources by significantly lowering the allowable levels of contamination in an effort to curtail pollution and protect its environment. With these “National Sword” policy changes coming fully into force as of December 31, 2017, China is now effectively closed as a market for the majority of post-consumer materials from outside sources, leaving many recycling programs throughout North America without a market for an array of materials collected for recycling.

As a result of changing markets for recyclable materials, the collection of large rigid plastic items at the Hartland recycling depot have been discontinued as of January 1, 2018 because China was the only market for this material and there currently are no local recycling alternatives for this material. This voluntary recycling program had typically diverted about 100 tonnes of material annually and represented less than 0.4% of the tonnage diverted by CRD recycling programs. Hartland customers are being advised that these materials are no longer being accepted for recycling and that they will be landfilled until such time as new markets for them emerge (see advisory in Appendix A).

CRD residential materials collected using curbside blue boxes are the responsibility of Recycle BC (RBC). RBC maintains ownership of and is responsible for the collection and recycling of all materials collected through their provincial curbside and depot programs. RBC has indicated that it has been able to maintain its markets for recyclable materials, including some in China, despite the new restrictions. However, some materials collected for recycling from commercial and multi-family sources outside the Recycle BC system are typically more contaminated than curbside materials and their marketability has been more significantly impacted by the tightening of Chinese requirements. As a result, unmarketable materials from these types of recycling collection programs have increased significantly and these residuals are being brought to Hartland landfill for disposal, as is permitted under CRD Bylaw 3881, the Hartland Landfill Tipping Fee and Regulation Bylaw No. 6, 2013.

CRD staff are monitoring the recent changes to recycling markets and will continue meeting with local and provincial service providers. An update will be provided to the Committee no later than June 2018 seeking direction regarding any potential changes to the Hartland Tipping Fee and Regulation bylaw that may be required for the Hartland landfill to better address ongoing recycling market challenges.

RECOMMENDATION

That the Environmental Services Committee recommend to the Board that this update be received for information.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

TW:ac

Attachment: Appendix A – Changing Markets for Canada’s Recyclable Materials

Changing Markets for Canada's Recyclable Materials

Capital Regional District |

China has been the principal end-market for the majority of North American post-consumer plastics and other recyclable materials for many years.

However, in July 2017 China announced plans to severely restrict the importation of waste and recyclable materials from outside sources in an effort to curtail pollution and protect its environment. The Chinese submission to the World Trade Organization regarding its intentions may be seen at: <https://goo.gl/3pu6yv>.

With these changes coming fully into effect as of December 31, 2017, the "National Sword" quality control policy now being implemented in China has effectively closed China as a market for post-consumer plastics from outside sources, leaving many jurisdictions throughout North America without a market for an array of plastics collected for recycling.

As a result, the collection of large mixed plastic items (e.g., lawn furniture, hard plastic swimming pools) had to be discontinued at the Hartland recycling depot as of January 1, 2018 after the CRD's processing and marketing contractor discontinued accepting them due to the fact that China was their only market for this material.

There are currently no other recycling alternatives for these plastics and so the difficult decision had to be made to direct them to disposal as solid waste. However, the closure of Chinese recycling markets has created an opportunity for markets for these materials to be developed elsewhere—including in Canada—and it is hoped that the collection of these materials for recycling might be resumed if and when new markets emerge.

Please note that at this time we don't anticipate China's new policy will impact the collection of curbside recyclables in the region.

For more information on what's accepted at Hartland Landfill, please visit www.crd.bc.ca/hartland.

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, FEBRUARY 7, 2018**

SUBJECT 2017 CRD Energy Step Code Program Update

ISSUE

To provide an update on the 2017 Capital Regional District (CRD) Energy Step Code program.

BACKGROUND

The BC Energy Step Code came into effect April 11, 2017. This technical regulation is a voluntary compliance path within the BC Building Code (Subsections 9.36.6. and 10.2.3. of Division B). It establishes progressive performance steps for new construction projects to take toward the target of net-zero-energy-ready buildings by 2032 from the current energy-efficiency requirements in the BC Building Code.

Building owners may voluntarily build to the requirements in the BC Energy Step Code. As of December 15, 2017, local governments can choose to require or encourage builders to meet one or more steps of the BC Energy Step Code as an alternative to the BC Building Code's prescriptive requirements. Local governments choosing to establish the BC Energy Step Code in their communities may select from a broad spectrum of policy tools that raise awareness, provide incentives, institute bylaw requirements, remove barriers to energy efficient building or demonstrate leadership. Each jurisdiction can select the tools most suitable to its community.

The BC Energy Step Code only applies to new construction of the following building types:

- Residential buildings (Part 9) – province-wide.
- Multi-unit residential and commercial buildings (Part 3) – only in climate zone 4 (e.g. lower Mainland, southern Vancouver Island and southern Okanagan).

The BC Energy Step Code Council (ESCC), comprised of builders, developers, governments, utilities and professional associations, and chaired by the provincial Building and Safety Standards Branch, developed the Step Code and is overseeing its implementation. Several publicly available education and research resources have been made available to support local governments, including a best practices guide.

The CRD Climate Action Program supports regional climate action efforts, in part, through research, education, capacity building and regional coordination activities. Aligning with actions identified in the CRD Regional Climate Action Strategy, the CRD received supportive funding from the BC Hydro Sustainable Communities Program to educate and engage local governments in the capital region on the BC Energy Step Code, to initially collect building industry feedback, and to collaborate with other local governments on the delivery of consistent industry (e.g. builder, realtor) education over the fall of 2017. Utilizing ESCC resources, staff worked with the CRD Climate Action Inter-Municipal Working Group (IMWG) to plan and execute the program.

A list of 2017 program activities and a summary of key program findings is attached as Appendix A. Appendix B includes the detailed building industry feedback and Appendix C provides the outcomes and regional opportunities identified during the municipal and realtor workshops. The CRD Board recently received letters from local builders' associations regarding implementation of the BC Energy Step Code. These letters can be found in Appendix D.

ALTERNATIVES

Alternative 1

That the Environmental Services Committee recommend to the CRD Board:

That this report be forwarded to municipal councils, the Electoral Area Services Committee and the Planning and Protective Services Committee for information.

Alternative 2

That this report be referred back to staff for further information.

ENVIRONMENTAL IMPLICATIONS

Buildings account for more than a third of regional greenhouse gas emissions. In conjunction with retrofit programs for existing buildings, the BC Energy Step Code supports regional and local government energy conservation and greenhouse gas reduction goals, especially in new homes that are likely to be heated with natural gas.

INTERGOVERNMENTAL IMPLICATIONS

The BC Energy Step Code applies to the same jurisdictions as the BC Building Code and does not apply to construction on First Nations or federal land.

Authority to implement the BC Energy Step Code for CRD Electoral Areas (Southern Gulf Islands, Salt Spring Island and Juan de Fuca) falls within the jurisdiction of the Electoral Areas Services Committee.

In January 2018, the City of Victoria and the District of Saanich endorsed a plan to further co-engage industry on a proposed Energy Step Code implementation approach for their communities. Beginning in February 2018, engagement will focus on a potential community-wide adoption of Step 1 for late 2018, then to Step 2 or 3 (depending on building type) in early 2020, and associated rebate program(s).

FINANCIAL IMPLICATIONS

The ESCC commissioned the BC Energy Step Code 2017 Metrics Research Study—also known as the “costing study” - based on a comprehensive analysis of data generated by energy modellers and builders from all across BC. The research shows that in most situations, builders can achieve the lower steps for less than a two percent premium above that of a home built to the

requirements of the BC Building Code. Some construction premiums mentioned in the media and other sources are much higher than those reported in this costing study. Further analysis is underway to understand the discrepancy between these values. In addition, new building users and owners would likely see a reduction in their operating and energy costs.

CONCLUSIONS

The BC Energy Step Code is currently a set of voluntary standards that local governments can choose to require or encourage builders to meet one or more steps as an alternative to the BC Building Code’s prescriptive requirements. The CRD recently undertook a program to educate and engage local governments in the capital region on the BC Energy Step Code, to collect industry feedback and collaborate with other local governments on the delivery of consistent education. Local governments within the region may use this information to inform their own programming and policies.

RECOMMENDATION

That the Environmental Services Committee recommend to the Capital Regional District Board:

That this report be forwarded to municipal councils, the Electoral Area Services Committee and the Planning and Protective Services Committee for information.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

NE:cam

- Attachments: Appendix A – 2017 CRD Energy Step Code Program Activities and Key Findings
Appendix B – Fall 2017 Capital Region Building Industry Engagement Summary
Appendix C – Project Report: CRD BC Energy Step Code Education Program
Appendix D – Correspondence (2)

2017 ENERGY STEP CODE PROGRAM ACTIVITIES AND KEY FINDINGS

2017 CRD Energy Step Code Program activities included:

1. *Capital Region Building Industry Survey (August 15 – September 15, 2017)*
 - To initially gauge local awareness and preparedness on behalf of local governments.
2. *CRD Housing Action Team Presentation (October 30, 2017)*
 - To update local housing stakeholders on Step Code and local engagement opportunities.
3. *Building Inspectors Working Session (November 6, 2017)*
 - To understanding Step Code changes and compliance considerations.
4. *Local Government Elected Official and Senior Staff Energy Efficiency Building Tour (November 10, 2017)*
 - To provide overview of step code, understand building implications and tour local high energy efficient buildings.
5. *Local Government Staff Workshop (November 30, 2017)*
 - To understand Step Code changes and discuss local government programs, policies and opportunities for consistency amongst municipalities.
6. *Realtor Workshop: “Selling Energy Efficiency” (December 8, 2017)*
 - To provide information on new and retrofit energy efficiency opportunities and tools and tour local high energy efficient buildings.
7. *Building Industry Workshop #1 (November 1, 2017) and follow-up survey (until November 27, 2017)*
 - Co-hosted by Urban Development Institute – Capital Region, Canadian Home Builders Association – Vancouver Island, City of Victoria, District of Saanich, District of North Saanich, CRD CAP. Educate on Step Code and collect feedback on barriers and opportunities for local programs and policies.
8. *Energy Literacy Communications Tools (ongoing)*
 - Locally focused backgrounders on energy efficiency technologies, costing, energy modelling and other considerations for the general public and industry.
9. *Local Government Peer Networks (ongoing)*
 - Participate in Vancouver Island and province-wide Energy Step Code peer networks.
10. *Local Government Support & Reporting (ongoing)*
 - To share information, best practices, and outcomes collected via the CRD Energy Step Code Program and provincial networks.

**Summary of Key Findings – BC Energy Step Code
Fall 2017 Capital Region Building Industry Engagement**

In regards to the CRD Survey, 81% of respondents indicated that they work or have worked in more than one municipality and that there is a strong desire for regional consistency on Step Code policies and processes.

Key opportunities identified through the survey and workshop were operational cost savings, greenhouse gas and energy reductions, and consumer benefits. Respondents indicated there is a need for training, education and awareness-raising amongst the building industry and general public, and that mechanisms need to be in place to ensure quality control and minimize risk and liability. There was a desire from participants to see incentives that support adoption, and to have builder and trades training available. There was a range of suggestions on what Step is achievable or should be adopted in the short term.

The complete building industry engagement summary is provided in Appendix B.

**Summary of Key Findings – CRD BC Energy Step Code
Local Government and Realtor Workshop Series**

The workshop series identified that capital region local governments have a high level of interest in learning about the BC Energy Step Code, and that ongoing engagement is needed to prepare for implementation. Given the new approach and stronger reliance on third party energy advisors, local governments will need to ensure streamlined processes, market availability and clear responsibilities.

There is a high level of interest in regional collaboration and coordination in implementing programs and policies, using model language and consistent compliance reporting, where possible. The CRD CAP and CRD Climate Action IMWG will continue to support this work.

Realtors also acknowledged an interest in learning about building energy opportunities, in relation to both new builds and retrofits. They are a useful resource to support public communication of local government programs and policies and the benefits of energy efficient homes.

A detailed description of local government and realtor workshop agendas and outcomes is provided in Appendix C.

BC Energy Step Code: Fall 2017 Capital Region Building Industry Engagement Summary

1.0 Introduction

The BC Energy Step Code is a provincial building regulation that applies to new residential, multi-unit and commercial construction. It provides a voluntary roadmap that establishes progressive performance steps in energy efficiency for new buildings from the current BC Building Code level to net zero energy ready buildings by 2032. More information is available at www.energystepcode.ca.

There are several engagement and training opportunities under way across the Province related to the Step Code ranging from BC Energy Step Code Council (ESCC) webinars and resources, industry lunch and learns and conference presentations through industry associations.

In the late summer and fall of 2017, working with staff on the CRD Climate Action Inter-Municipal Working Group (IMWG), the CRD Climate Action Program (CRD CAP) supported regional engagement activities to gather local building industry feedback on the BC Energy Step Code on behalf of local governments. Objectives of these engagement activities were to:

- Generate broad awareness on the BC Energy Step Code, in support of the CRD Energy Step Code Program (see Section 1.1).
- Collect initial building industry feedback on local step code policy and program opportunities.
- Further understand current industry practices and readiness around new energy efficient buildings.
- Support the development of educational tools.
- Understand how to best support industry construction of better performing buildings, in relation to energy efficiency.

1.1 Fall 2017 CRD Energy Step Code Program

The CRD CAP, with financial support from BC Hydro Sustainable Communities led the CRD Energy Step Code Program in the fall of 2017 (herein referred to as the 2017 Step Code Program).

The CRD Climate Action IMWG (with additional municipal Building Official guests) provided input into the overall scope of the program, and sustainability staff from Victoria and Saanich provided ongoing guidance and input into the CRD online survey and various workshops. Victoria and Saanich staff also led the development of the November 1 Building Industry Workshop and follow-up survey.

The scope of the 2017 Step Code Program consisted of the following activities:

- 1. Capital Region Building Industry Survey**
 - To determine local awareness and preparedness and to inform workshop engagement
- 2. CRD Housing Action Team Presentation**
 - ESCC presentation, CRD Builder Industry Survey, local government engagement plans
- 3. Building Inspectors Working Session**
 - Understanding energy modelling and air tightness testing, Energy Advisors role, reporting the Step Code
- 4. Local Government Staff Workshop**

- Results of the Building Industry Survey, implementation considerations, opportunities and gaps, next steps
- 5. Local Government Elected Official and Senior Staff Energy Efficiency Building Tour**
 - ESCC presentations, results of CRD Builder Industry Survey, tour of energy efficient buildings equivalent to different Step Code levels and Q&A with developers.
- 6. Realtor Workshop: “Selling Energy Efficiency”**
 - New and retrofit energy efficiency, tour of retrofit and new homes, informational toolkit
- 7. Building Industry Workshop #1 (November 1, 2017) and follow-up survey (until November 27)**
 - Co-hosted by Urban Development Institute – Capital Region, Canadian Home Builders’ Association – Vancouver Island, City of Victoria, District of Saanich, District of North Saanich, CRD CAP
- 8. Energy Literacy Communications Tools**
 - Backgrounder on Step Code, energy efficiency technologies, costing, energy modelling and other considerations for the general public and industry.
- 9. Local Government Peer Networks**
 - Participate in and share information from Vancouver Island and province-wide Energy Step Code peer networks.

The CRD retained City Green Solutions to assist in the development, execution and final reporting of #3 to #6, above. A separate report outlining the scope, attendance and outcomes of the workshops is provided in a separate report, entitled *Project Report – CRD BC Energy Step Code Education Program, City Green Solutions (December 2017)*.

1.2 Scope of this Report

This report provides results of feedback collected by the CRD CAP and partners between August 2017 and November 27, 2017. Results are categorized as follows:

- CRD Building Industry Online Survey
- Building Industry Workshop #1 and follow-up survey

Unsolicited written or verbal correspondence intended for the CRD Board or provided directly to municipalities is not included in this report.

1.3 Key Findings

The majority of respondents indicated that they work within more than one municipality in the capital region. There is a strong desire for regional consistency on step code policies and processes.

In summary, key opportunities identified through the survey and workshop were operational cost savings, greenhouse gas and energy reductions, and consumer benefits. Respondents indicated there is a need for training, education and awareness-raising amongst the building industry and general public, and that mechanisms need to be in place to ensure quality control and minimize risk and liability. There was a desire from participants to see incentives that support adoption, and to have builder and trades

training available. There was a range of suggestions on what step is achievable or should be adopted in the short term.

2.0 CRD Building Industry Online Survey

Working with, and on behalf of local governments within the region, the CRD CAP developed a survey to gather local building industry feedback on the BC Energy Step Code. The purpose of this survey was to:

- Establish an initial sense of local industry readiness for the BC Energy Step Code.
- Support the development of needed educational and capacity building programming.
- Understand the best mechanisms to support industry in developing better performing buildings as outlined in the BC Energy Step Code.

2.1 Method

The survey was distributed and promoted between August 11 and September 15, 2017.

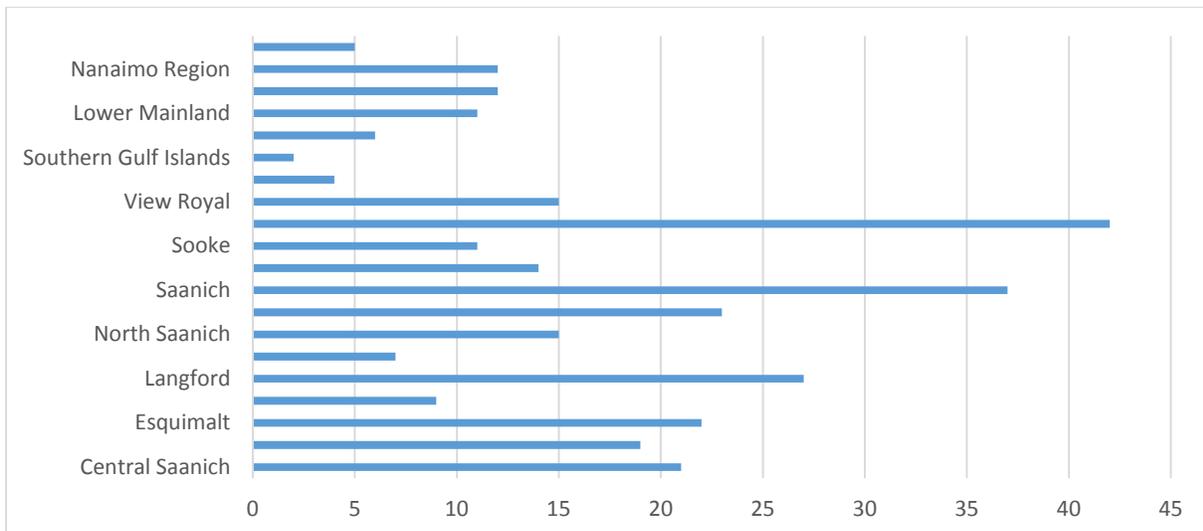
Requests to distribute the survey were sent to local building industry associations including but not limited to: Canadian Home Builders' Association (CHBA) – Vancouver Island, Urban Development Institute (UDI) – Capital Region, Victoria Residential Builders Association, local business associations, construction associations, and to local governments via their builder lists.

2.2 Results

The CRD received 57 total applicable responses. The following results are from the online survey.

Question 1: In which municipalities and electoral areas are your projects located? Check all that apply.

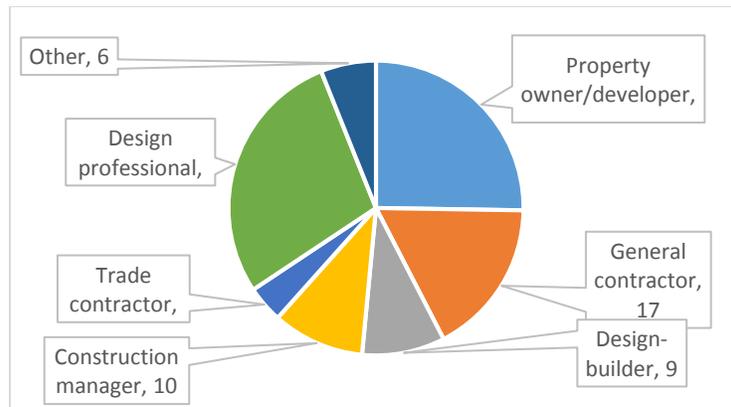
Responses – 57



Based on this information, 81% of respondents build or have built in more than one municipality; 49% build or have built in five or more municipalities.

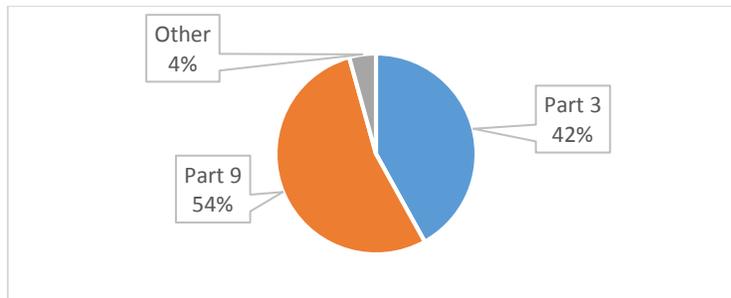
Question 2: How would you describe your role in the building industry? Check all that apply.

Responses - 57



Question 3: Which types of buildings do you construct (Part 3, Part 9, other)? Check all that apply.

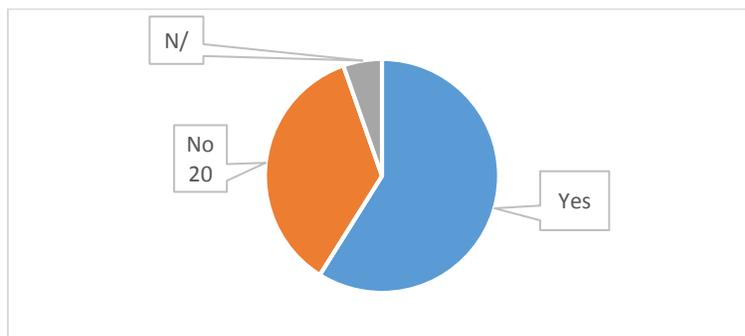
Responses - 56



Question 4: Do you currently build using a performance path for energy efficiency?

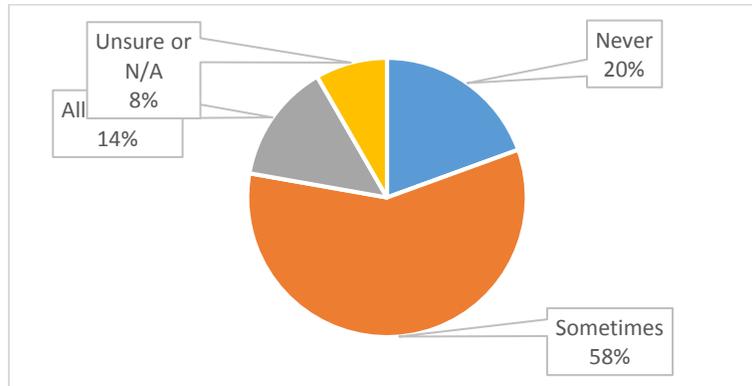
A performance path requires that the building as a whole performs to a certain standard, as opposed to a prescriptive path that requires each component be built to a certain standard (e.g. Wall R-value at least 20.)

Responses - 56



Question 5: For Part 3 buildings, on what percentage of your projects do you currently use an energy model program?

Responses - 36



Question 6: For Part 3 buildings, has using an energy model program helped to improve design performance or resulted in other benefits?

Responses: 23

In regards to design performance, of the written responses:

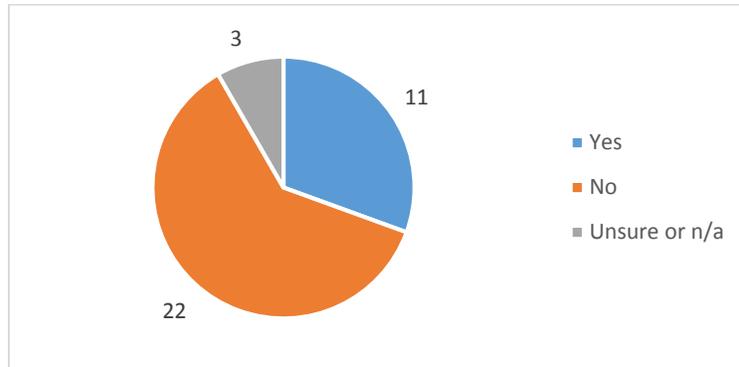
- 17 or 74% indicated there is benefit to using an energy model
- 2 or 9% indicated sometimes or somewhat of a benefit
- 2 or 9% indicated there is no benefit to using an energy model
- 2 or 9% indicated unknown.

Other benefits noted include:

- Improved energy performance and independent modeller saved capital costs through finding errors on design documents during design phase (i.e. before tender and construction).
- Better comfort for occupant.
- Higher sale prices.
- Optimized cost benefit analysis.
- Better understanding of building performance.
- In many cases energy modeling is the only way to properly quantify performance.
- Generally results in more deliberate design decisions.
- Good to understand where dollars can be best applied to meet the target performance.
- Trade-offs: the energy model has sometimes allowed us to see how efficient we design already without it or prior to applying the model calculations.

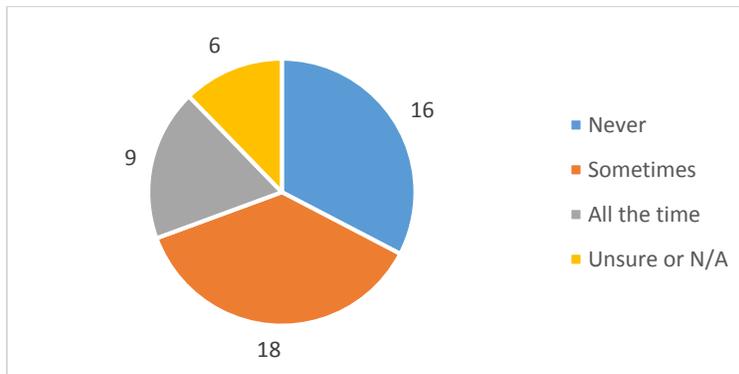
Question 7: For Part 3 buildings, do you currently engage a Commissioning Authority to confirm building performance and energy use upon completion of a project?

Responses - 36



Question 8: For Part 9 buildings, what percentage of your projects do you currently use an energy model program?

Responses – 49



Question 9: For Part 9 buildings, has using an energy model program helped to improve design performance or resulted in other benefits?

Responses – 24

In regards to design performance, of the written responses:

- 18 or 75% indicated there is benefit to using an energy model.
- 4 or 17% indicated there is no benefit to using an energy model.
- 2 or 8% indicated unknown.

Other benefits noted include:

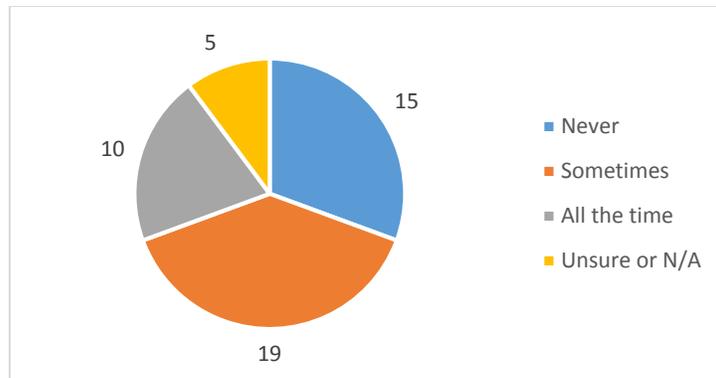
- Better targeting spending.
- Better building comfort which leads to higher customer satisfaction and higher sale prices. People are willing to pay more for better buildings.
- It has primarily helped to reassure clients that their investment in a higher energy performance makes sense both environmentally and economically. The well-structured model makes it easier

to accept as being valid and meaningful, as opposed to the older style of discussions with clients around the advantages of just buying better windows, or increasing attic insulation, etc.

- Results in more deliberate design decisions.
- Better comfort for occupants. Much more efficient building. Cost optimization for improvements.
- It definitely helps us to make sure our construction techniques are on point to ensure we are providing healthy durable homes for our customers.
- Generally an overall better quality of build, in particular tightness of building.

Question 10: For Part 9 buildings, what percentage of your projects do you conduct airtightness testing (ex. blower door testing)?

Responses - 49



Question 11: For Part 9 buildings, how has blower door testing or other airtightness testing helped to improve design performance?

Responses - 24

In regards to design performance, of the written responses:

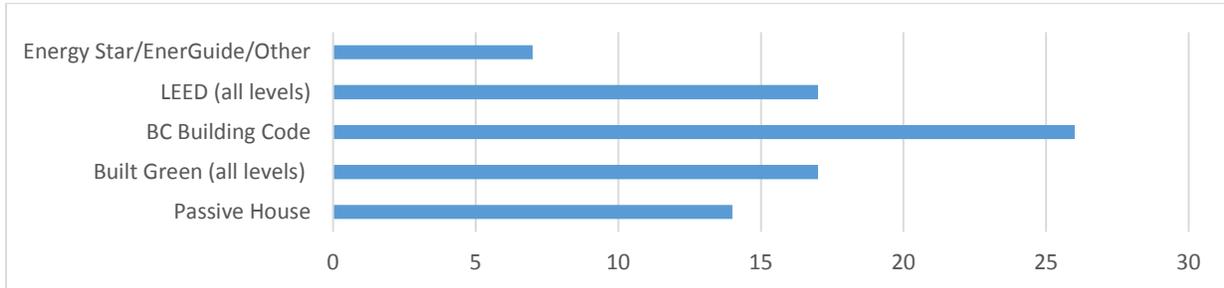
- 18 or 75% indicated there is benefit to using an energy model.
- 3 or 12% indicated there is no benefit to using an energy model.
- 3 or 12% indicated unknown.

Other benefits noted include:

- Helps to locate air leakage and deal with leaks early.
- Air leakage is one of the biggest losses in buildings and is a key measure for building verification and quality assurance.
- Focuses design attention on appropriate detailing and provides a hard requirement that the contractor knows they have to meet.
- Knowing it is happening and having it as something to measure our building quality against other builders is a great asset.
- As professional designers we know that 80 - 90% of the heat loss in a building is due to leakage/convective effects, not conduction.

Question 12: To which energy efficient home building standard(s) do you typically design or build (For example: BC Building Code, EnerGuide Rating System, LEED Silver, LEED Gold, Built Green, ENERGY STAR for New Homes, R-2000, Passive House etc.)?

Responses -53



Question 13. What is the most stringent energy efficient home building standard you have designed or built?

Responses – 47

Standard Noted	# of Responses
BC Building Code / None above	9
Passive House	13
Built Green Platinum	1
Built Green Gold	3
LEED Platinum	1
LEED Gold	7
LEED	4
Energy Star	1
Living Building Challenge	2
86	2
R2000	2
NECB/ASHREA	1
Net Zero Energy	1

Question 14: Do you consider the following a barrier to constructing more energy efficient homes?

	Always	Sometimes	Never	N/A	Responses
Incremental cost	31	13	8	0	52
Insufficient construction methods expertise	13	31	9	1	54
Insufficient energy modelling expertise	7	23	21	3	54
Insufficient airtightness testing expertise	7	21	19	6	53
Sub-trade coordination	11	29	9	3	52
Inability to convey long-term benefits to market	16	25	10	3	54

Question 15: Are there other barriers to constructing more energy efficient homes?

Responses - 36

Other barriers noted are categorized as follows. Detailed responses are found in Appendix A. Note: Table does not included repeats of items noted above, or “no” or “n/a” responses.

Barrier Category	# of responses
Public/consumer knowledge	9
Product availability	6
Differing Building Official interpretations / municipal inconsistencies	6
Changing the status quo or breaking habits	5
Impacts to affordable housing	2
Unclear implications on other parts of the BC Building Code	1
Political willpower	1
Design limitations	1
User behaviour	1

Question 16: Do you consider the following a benefit to constructing more energy efficient homes?

Benefit	Always	Sometimes	Never	Responses
Marketability	22	18	11	51
Industry Leadership	20	24	7	51
Measurable Performance	26	19	8	53

Question 17: Do you consider the following a benefit to constructing more energy efficient homes?

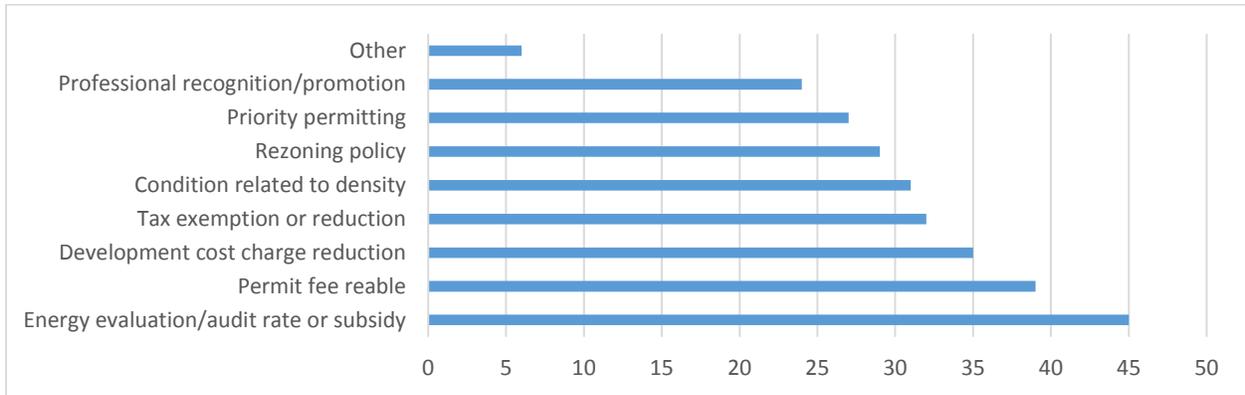
Responses – 29

Other benefits noted are categorized as follows. Detailed responses are found in Appendix A. Note: Table does not included repeats of items noted above, or “no” or “n/a” responses.

Benefit Category	# of responses
Long term affordability / lifecycle costs	8
Quietness / comfort	7
Health / quality	6
Overall energy use reduction	5
Climate / environmental	4
Advances construction industry	3
Building science / envelope	3
Long term durability	2
Simplicity of systems	2
Assists in municipal rezoning negotiations	1
Disaster resilience	1

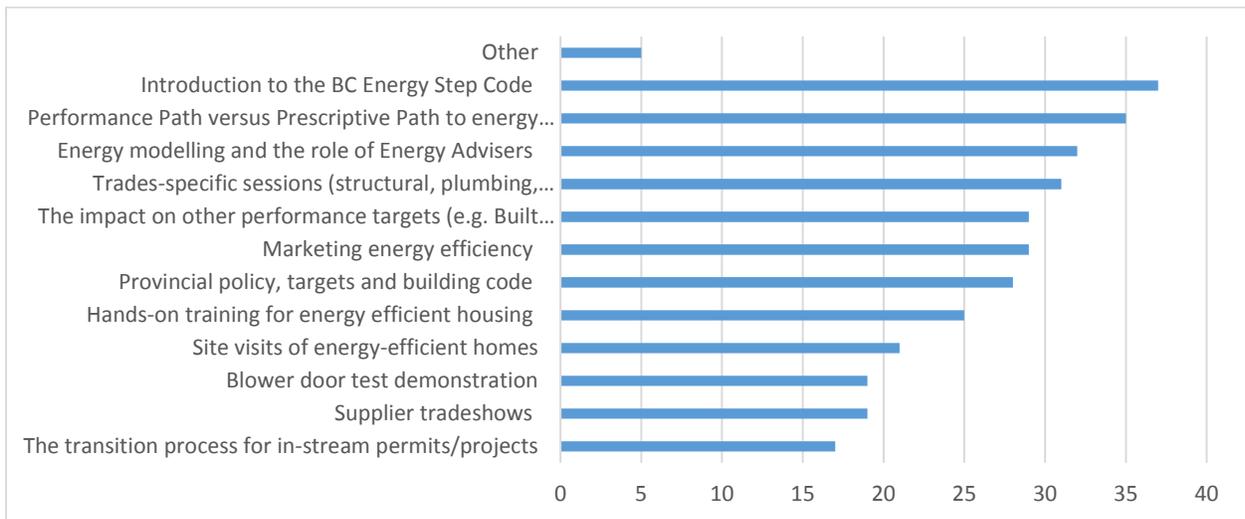
Question 18: If a municipality were to provide incentive(s) to the building industry in support of BC Energy Step Code implementation, what incentives would you like to see? Check all that apply.

Responses: 52



Question 19: Which topics would be helpful in future training sessions? Check all that apply.

Responses: 52



3.0 Building Industry Workshop #1 (November 1, 2017) and follow-up survey (until November 27)

The City of Victoria, District of Saanich, District of North Saanich, CRD CAP, Canadian Home Builders' Association – Vancouver Island (CHBA) and Urban Development Institute – Capital Region (UDI) planned and delivered an in-person building industry engagement workshop on local opportunities for the Step Code.

The purpose of this workshop was to provide information and raise awareness of the Step Code and for industry to provide feedback to municipalities in the Capital Region on the opportunities and potential approach for local implementation, including Step levels, timeline and support required.

3.1 Method

The workshop was held on November 1, 2017 and designed with input from UDI, CHBA, local government staff and feedback from the industry survey. The workshop was promoted through CHBA and UDI newsletters, mailing lists, municipal builder lists, local government websites and flyers at planning and engineering front counters.

The workshop format included formal presentations from representatives of the Province of BC Building Safety Standards Branch, the CRD CAP, City of Victoria and District of Saanich, a local energy modeller/advisor, and local builders and designers of both Part 9 and Part 3 buildings, followed by a question and answer period. A facilitated table discussion was then held based on pre-determined questions with table facilitators. Attendees received a hardcopy follow-up survey, which they were encouraged to fill out at the event or return to staff at the City of Victoria and District of Saanich by November 27, 2017.

3.2 Results

There were 90 attendees at the workshop, and organizers received 13 follow-up surveys. Through an informal survey of attendees, approximately a quarter identified themselves as working on both Part 3 and Part 9 buildings, the remainder indicated they work on Part 9 buildings only.

3.2.1 Facilitated Table Discussions

For the discussions, there were eight tables total. Five tables were labelled as Part 9, and three were labelled as Part 3. Attendees chose where to sit. Tables 1-4 provide a summary of the feedback from the facilitated table discussion.

Q1 a. What are your key concerns regarding implementation of the Step Code?		
Training / Education / Awareness (7 out of 8 tables)	General Comments	<ul style="list-style-type: none"> • Need for local, Vancouver Island based training • Shortage of trainers • Understanding roles, especially energy advisors • Concerns about accurate information and need to address misinformation • Need to set clear expectations

Q1 a. What are your key concerns regarding implementation of the Step Code?		
	Municipalities	<ul style="list-style-type: none"> • Building officials training – ensures consistent application • Misinterpretation/misinformation on applications across municipalities, timelines etc.
	Builders	<ul style="list-style-type: none"> • Busy schedules & demands – hard to undertake • Training for all- especially the inexperienced e.g. unregistered building designers are not included in the conversation • More work for consultants to support staff training • Challenging to change habits
	Sub-trades	<ul style="list-style-type: none"> • Required – need to clarify who is responsible for training • Prefer on-site options
	Public	<ul style="list-style-type: none"> • Need buyer awareness • Education for all to address fear of change
Risk, Assurance and Liability (7 out of 8 tables)	Technology & New Products	<ul style="list-style-type: none"> • Desire to ensure new technology is proven • Risk of new products being used incorrectly • Risk of stretching to reach higher steps beyond capabilities
	Quality Control Issues	<ul style="list-style-type: none"> • Future issues e.g. vapour issues • Workmanship - no/little control • Trades, etc. have skills
	Liability	<ul style="list-style-type: none"> • Performance confirmation e.g. through letters of assurance.
Regional Consistency (4 out of 8 tables)	Municipal Coordination	<ul style="list-style-type: none"> • Need general coordination between municipalities • Need consistency between building officials • Questioned whether Province is providing direction for consistency in implementing across municipalities • Similar requirements and timing for implementation regionally
Enforcement / Reporting (3 out of 8 tables)	General	<ul style="list-style-type: none"> • Slow permitting process • Implications if required Step is not met • Follow-up – commissioning, performance, occupancy
Additional Comments	General	<ul style="list-style-type: none"> • Lack of available energy auditors • Availability of energy verifications for Part 3 buildings • Product availability and access for first timers. • Limiting choice for consumers (e.g. electric vs. gas) • Step Code for renovations to achieve municipal targets

Q1 b. What are the key opportunities regarding implementation of the Step Code?		
Operational Savings & Consumer Benefits (5 out of 8 tables)	Messaging & Communication	<ul style="list-style-type: none"> • Need more communication in general • Messaging related to operational savings • Consider pay back and full cost, not just upfront capital • Consumer awareness of value/thermal comfort
	Added value and quality control	<ul style="list-style-type: none"> • Ensures quality control and transparency for consumers • Ability to enforce and report building code compliance (energy) • More opportunities beyond the costing study

Q1 b. What are the key opportunities regarding implementation of the Step Code?		
		<ul style="list-style-type: none"> Market demands energy efficiency - forces developers to higher standard Cost vs. performance, opportunity to see the bigger picture Generally low cost for considerable value
Additional Comments	General	<ul style="list-style-type: none"> Allows for innovation Lower steps only require quick learning curve Collaboration and consistency across region and province Provides predictability to building industry re: forecasting New business opportunity for support agencies

Q2. What would help with adoption?		
Incentives (6 out of 8 tables)	General	<ul style="list-style-type: none"> Useful to offset incremental costs Provincial and municipal support Incentives valuable for at least 2 years to allow for process
	Rebates	<ul style="list-style-type: none"> Incentivize the energy audit Prefer money back Utilities should be contributing to these as well Building permit rebate
	Land Use	<ul style="list-style-type: none"> Density bonus incentive Re-zonings/development permit with covenant
	Other	<ul style="list-style-type: none"> Get training credits in ways to reach steps Tax incentive program Caution about the impact fast tracking may have on other applications
Builder and Trades Training (5 out of 8 tables)	Training Topics	<ul style="list-style-type: none"> Clear professional responsibility and people understanding Prescriptive vs. performance
	Format	<ul style="list-style-type: none"> Accessible, practical training on-site vs. desk based Ability for sub-trades/developers to attend mid-construction blower door test and energy evaluation walkthrough of active developments to learn on-site on regional projects Building tours Get training credits in ways to reach steps Workshop focused (e.g. walls)
	Support	<ul style="list-style-type: none"> Municipalities support identification of developers willing to allow other industry players to come on their site for energy evaluation learning through forms? Requirement of a financial incentive to get the mid-construction blower door test? UDI or CHBA facilitate registration for onsite blower door tests/walk through onsite training? Addresses the need for local training in a real scenario whilst reducing resource requirements and understanding that the workforce is extremely busy. Provincial/municipal support

Q2. What would help with adoption?		
		<ul style="list-style-type: none"> • Municipalities could offer in-kind space for training. • Need expertise/consultants.
Municipal Consistency and Policy (4 out of 8 tables)	Training and Education	<ul style="list-style-type: none"> • Need for collaboration and consistency • Building Officials training to ensure consistent interpretation • Community and elected officials training to ensure they do not ask for architectural or design features that limit ability to achieve higher Steps
	Policy	<ul style="list-style-type: none"> • Amend method for calculating allowable areas and height of buildings to ensure energy efficient buildings are not penalized for thicker walls or high trusses required for additional insulation • Amend design guidelines to reflect some of the design restrictions that may apply to Step 4/5 net zero developments • Allow for grace periods • Consistent plan if projects don't meet targets • Should have to model to Step 2 or 3, to meet Step 1 • Provide sufficient lead-time for implementation – min. 6 months for lower levels
Blower Door Tests & Energy Advisor (3 out of 8 tables)	General	<ul style="list-style-type: none"> • List of Energy Advisors needs to be publicized • Energy advisor will help with learning curve • Should be tied to performance • Mid-point blower door should be mandatory
Robust Information and Education Campaign (3 out of 8 tables)	General Audience	<ul style="list-style-type: none"> • Deadlines and timelines • Municipalities have to opt into its use • Step 1 is just reporting (no change to code) • Packaged consumer education to explain tangible benefits – use story telling, language is important
	Target Audience	<ul style="list-style-type: none"> • Politicians (key for rezoning/Development Permit applications) • Homebuyers - link to financing/mortgage • Front counter staff - knowledgeable & enthusiastic • Local building magazines, realtors and home tours
Additional Comments	General Comments	<ul style="list-style-type: none"> • Energy modelling encourages integrated design processes • Data capture and energy labeling - educate realtors and include in home inspections • Strong local government and provincial leadership

Q3. What Step do you think is achievable today and into the future?		
Step 2 (4 out of 8 tables)	General	<ul style="list-style-type: none"> • This is already best practice – small learning curve • Similar materials used but need to show how similar
	Timing	<ul style="list-style-type: none"> • Achievable now • Safe and reasonable for next 2-5 years
Step 1	General	<ul style="list-style-type: none"> • BC Province should state what step with Step 1 required

Q3. What Step do you think is achievable today and into the future?		
(4 out of 8 tables)		<ul style="list-style-type: none"> Require model to Step 2/3 but meet Step 1 - allow grace period Will help to train and learn process
	Timing	<ul style="list-style-type: none"> Now as introduction, with lead time, mid-end of 2018 Achievable today
Step 3 (3 out of 8 tables)	General	<ul style="list-style-type: none"> Uses conventional techniques – small learning curve Some Part 9 already achieving Step 3 and Step 4 for Part 3 Transitioning from Step 3 to 4 will be more challenging
	Timing	<ul style="list-style-type: none"> Now
Additional Comments	General comments	<ul style="list-style-type: none"> Municipal policy – mandate lower and incentive higher Steps Provide consistent standards amongst building form Requirements and quality need to be considered together Provide sufficient lead-time Municipalities should forecast out (ex. 2 years, then 5 years). Steps depend on which municipality

3.2.2 Follow-up Survey Findings

A follow-up survey was provided to attendees at the November 1, 2017 workshop in print and digital format. The survey included the same questions asked at the industry workshop and allowed for additional feedback from attendees as well as feedback from other industry members unable to attend the event. Hosts collected the surveys at the event, and also allowed for submittals up to November 27, 2017. A total of 13 surveys were received and the feedback focused on similar themes identified at the industry workshop as outlined in Figures 1-3 and Tables 5-7 below.

Figure 1: In what municipalities or electoral areas within the Capital Region do you work?

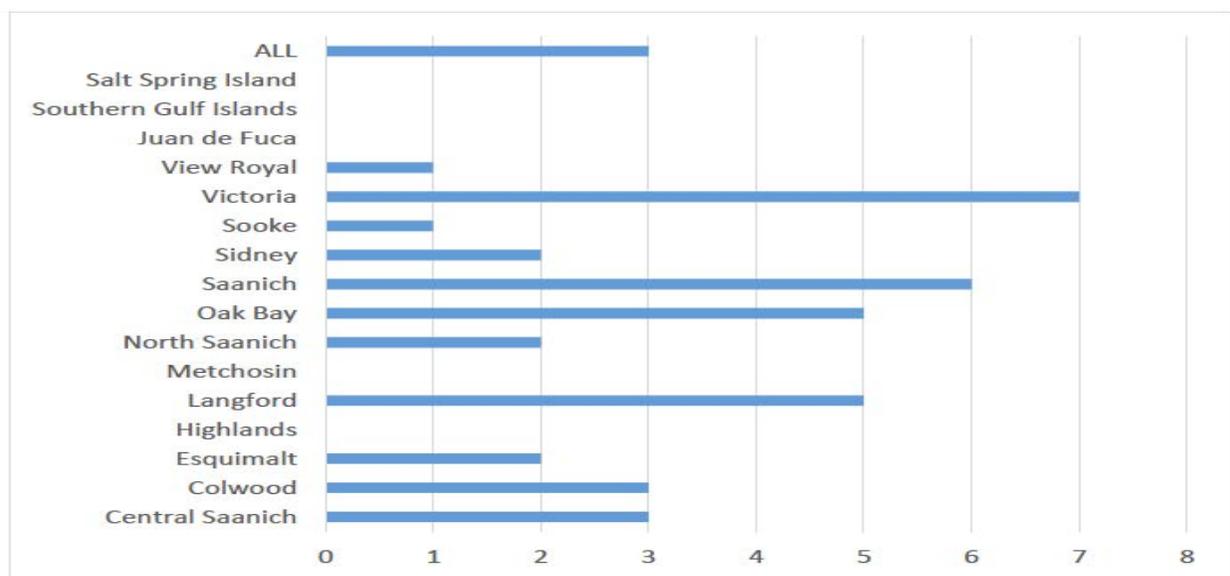


Figure 2: How would you describe your role in the building industry?

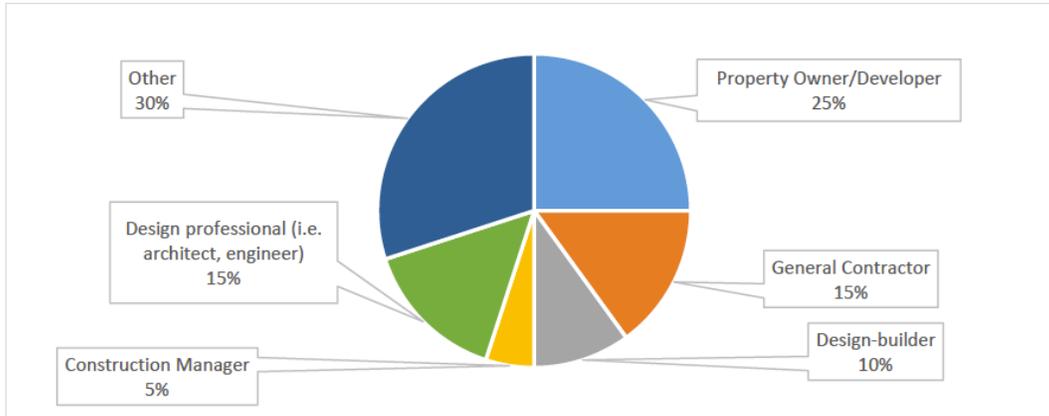
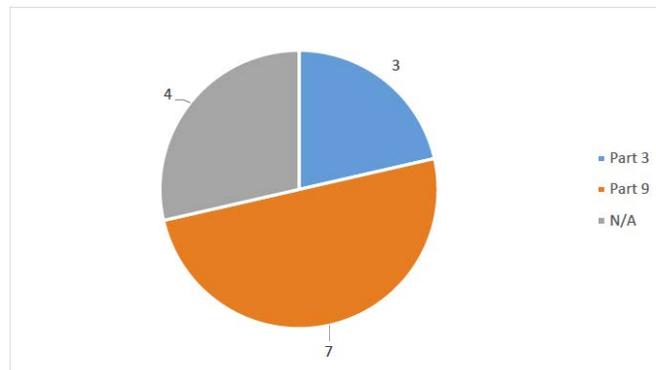


Figure 3: What type of buildings do you construct?



Question: Key concerns and opportunities regarding implementation of the Step Code

Key Concerns (# responses)	Key Opportunities (# responses)
Education, awareness, communications and training (5)	Quality control (6)
Consistency between municipalities (4)	Greenhouse gas reduction (4)
Municipal readiness (3)	Operational savings (1)
Lack of buy-in (2)	Awareness and profile (1)
Lack of energy modellers and energy advisors (2)	Predictability (1)
Risk, assurance and liability (2)	Economic and business opportunities (1)
Costs (1)	Consumer benefits (1)
None (1)	

Question: What would help with adoption of the Step Code?

What would help with Adoption (# responses)
Education and training (9)
Incentives (2)
Energy labeling on all new homes / Quality Assurance (2)
Builder inspector training (1)

Energy modeling (1)
Collaboration and Consistency (1)

Question: What Step is achievable today and into the future?

Step Level (# responses)	Detailed comments
Step 4/5 (6)	<ul style="list-style-type: none"> • Step 5 - currently do passive house. May be a stretch now - but within 3-5 years • Net zero actual - 5-7 years due to solar photovoltaic cost curve • Step 4 by 2025 (Part 3 Net zero ready) • Step 5 by 2030 (Part 9 net zero ready) • Step 4/5 by 2032 • All steps are achievable today – some builders require training • Any builder able to achieve middle steps – fairly easy to achieve top step
Step 2 (4)	<ul style="list-style-type: none"> • Step 1 and 2 are current practice - do now, easy and safe • Already existing bylaws and growing base of high performance builders.
Step 1 (2)	<ul style="list-style-type: none"> • Step 1 now - Step 3 by 2020
Step 3 (1)	<ul style="list-style-type: none"> • Step 3 now • Step 3 by 2020

4.0 Next Steps

The feedback above will be summarized alongside input from other CRD Step Code events and presented to the CRD Board in early 2018. This will then be provided to local municipalities for their information and to inform options for implementation where applicable. The CRD CAP will support municipalities on their efforts, as required, through the CRD Climate Action IMWG.



PROJECT REPORT
Capital Regional District
BC Energy Step Code Local Government & Realtor Workshop Series
CRD Energy Step Code Program

10 January 2018

Submitted By:

Peter Sundberg
Executive Director
City Green Solutions

214 620 View St
Victoria BC, V8W 1J6
250.381.9995

Peter.Sundberg@citygreen.ca

GST number: 810510873 RT0001

Submitted To:

Nikki Elliott
Climate Action Program Coordinator
Capital Regional District 250.360.3048

nelliott@crd.bc.ca

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Report Summary

This summary report follows the September 2017 to December 2017 delivery of 4 distinct workshops and educational materials in support of the Capital Regional District's Energy Step Code Education Program. The focus of these workshops was primarily on Part 9 buildings, but Part 3 BC Energy Step Code requirements were included in the discussions and in the elected official and senior staff home and building tour.

The goal of the program was to:

- Support the design and delivery of a four-part workshop series and develop educational materials on the BC Energy Step Code for local government staff and elected officials and real estate agents within the Capital Region in the fall of 2017.
- Educate, build capacity and identify opportunities for regional or sub-regional consistency of BC Energy Step Code programming and/or policies, referencing the materials and content (under development or to be released shortly) of the BC Energy Step Code Council.

Core deliverables included:

- Education program planning
- Design, delivery and facilitation of 4 workshops across the capital region for key target audiences
- Provide content for 2 energy literacy brochures (new homes and existing homes)
- Provide a summary report

Roles:

City Green was hired for:

- Program planning
- Workshop design and delivery and facilitation
- Energy literacy brochure content development
- Reporting

The CRD was responsible for the following activities:

- Planning and coordination
- Workshop recruitment, advertising and registration
- Space, catering and transportation logistics planning and costs
- Design work associated with the energy literacy materials
- Active participation in workshop delivery, including presentations on CRD activities

The Workshops

TITLE	DATE (2017)	LOCATION	ATTENDANCE
REGIONAL BUILDING INSPECTORS: THE BC ENERGY STEP CODE IMPLEMENTATION WORKSHOP (PART 9 BUILDINGS)	Nov. 6	Olympic View Golf Club	38
ELECTED OFFICIALS AND SENIOR LOCAL GOVERNMENT STAFF: INTRODUCTION TO THE BC ENERGY STEP CODE WITH ENERGY EFFICIENT BUILDING WALKING AND BUS TOUR	Nov. 10	CRD Commons Room	25
LOCAL GOVERNMENT: WORKING SESSION ON BC ENERGY STEP CODE POLICY & IMPLEMENTATION	Nov. 30	Cedar Hill Golf Course Club House	31
REALTORS®: SELLING THE BENEFITS OF ENERGY EFFICIENT HOMES WITH ENERGY EFFICIENT HOME BUS TOUR	Dec. 8	Victoria Real Estate Board	31

Key Findings

The workshop series identified the following key findings:

HIGH LEVEL OF INTEREST AND ONGOING ENGAGEMENT NEEDED TO PREPARE FOR IMPLEMENTATION

Participants of the workshops showed a high level of interest in learning about the BC Energy Step Code.

- The BC Energy Step Code is a new policy and all the key stakeholders have much to learn in preparation for implementation.
- There is a need for ongoing dialogue and engagement of all key stakeholders.
- There is a need for a clearing house for Frequently Asked Questions on the BC Energy Step Code.
- There is interest in accessing model BC Energy Step Code implementation documents.
- There is interest in understanding the baseline of how many builders have been building energy efficient homes prior to the introduction of the BC Energy Step Code and in tracking the annual uptake in the region.

REGIONAL COLLABORATION AND COORDINATION

There is a high level of interest in regional collaboration and coordination. See Appendix 3 for more details. The priorities and highlights identified for regional collaboration and coordination include:

- **Model Materials, Processes and Language:** Interest in access to model BC Energy Step Code processes (process maps) for integrating the BC Energy Compliance Report into existing permitting processes and in model language and materials for planning.
- **Encouragement of Step Code: To assist market demand and voluntary industry participation in the BC Energy Step Code the preferred options identified were:**
 - Consumer engagement on value proposition for purchasing efficient homes
 - Supporting BC Energy Step Code builder orientation sessions and learning forums.
- **Incentives: The preferred option to financially incentivize the BC Energy Step Code was identified as:**
 - Mid-construction blower door test subsidies
 - Pre-construction energy evaluation subsidies

- A common concern was that the concept of incentivizing energy efficient new construction was a cost to the community, when there is limited budget or other community priorities.
- **Policy Development:** Jurisdiction-wide building bylaw (e.g. Step 1)
- **Role for CRD Climate Action:**
 - Continuing to play a coordination role in advancing BC Energy Step Code education and continuing to bring local governments together for workshops and education.
 - Providing local governments with access to the results of the CRD BC Energy Step Code Education program
 - Development and/or sharing of model BC Energy Step Code policies and programs
 - Advancing discussions on appropriate BC Energy Step Code incentives

BC ENERGY COMPLIANCE REPORT

The BC Energy Compliance Report was presented in the Building Inspector workshop in a draft version and the approved version in the Local Government Implementation workshop. The feedback on the BC Energy Compliance Report can be summarized as follows:

- There was positive feedback on the concept of a BC Energy Compliance Report template to provide a standardized and consistent report for verification purposes.
- The building inspectors provided valuable recommendations on changes that could be made to the draft version of the report. These recommendations were incorporated into the final version.
- There are many questions about which industry stakeholders can produce the compliance report, the capacity of energy modellers (will there be enough) and about how the providers of BC Energy Step Code Compliance Report can be located.

ENERGY ADVISORS/SERVICE ORGANIZATIONS: CAPACITY, ABILITY TO LOCATE, CREDENTIALS, & QUALITY ASSURANCE

Given the BC Energy Step Code is a performance based approach that requires energy modelling and the services of energy advisors there were many questions about the energy advisor and service organization industry and about other professionals that can provide Part 9 energy modelling services. Local governments should continue to work with the CRD Climate Action Program, BC Building Safety Standards Branch and the BC Energy Step Code Council to provide further information and support, as required.

Recommended Next Steps

The following are proposed for consideration as recommended next steps:

1. **Regional Collaboration and Coordination:** Based on input from workshop participants the CRD should formalize a regional collaboration and coordination plan. This plan could include information on:
 - The ongoing role of CRD Climate Action in advancing coordination and collaboration in the region.
 - Collaboration opportunities with the BC Energy Step Code Council and other Regional Districts.
 - Specific goals, activities and timelines for engaging local governments, builders and the energy advisor industry.
2. **BC Energy Step Code Information:** It was identified there is a need for access to more summarized information, which may include:

- Well-developed BC Energy Step Code website resources:

- BC Energy Step Code Fact Sheets
 - BC Energy Step Code Frequently Asked Questions
 - Sample BC Energy Step Code information that can be provided to local governments to post on their own websites
 - BC Energy Step Code resource staff people to contact with questions
3. **Compliance Report:** Local governments in the capital region should consider formally adopting the BC Energy Compliance Report for BC Energy Step Code compliance purposes. To assist this process of adoption, the CRD should ask the BC Energy Step Code Council to consider:
- Developing a summary document to explain what the BC Energy Compliance Report is and how to use it for:
 - Local Governments
 - Builders
 - Continue advancing discussions and sharing of information on best practices for integrating the BC Energy Compliance Report into local government planning processes.
4. **Communication to Energy Advisor and Service Organization Sector:** The CRD should ask the BC Energy Step Code Council to communicate to the EnerGuide Rating System energy advisor and service organization industry that there is a need to respond to questions about:
- Capacity to meet market demand (by region, and remote areas)
 - Insurance and WCB coverage
 - Average cost of services
 - Credentials (training, licencing, registration, code of ethics)
 - Defining the roles of NRCan, service organizations and registered energy advisors
 - How/where can builders/local governments locate all EnerGuide Rating System energy advisors
 - Quality assurance (on EnerGuide Rating System files and on the BC Energy Compliance Report)
 - What is verified at the As-Built (post construction) stage
5. **Further Engagement of REALTORS®:**
- a) Local governments and other stakeholders should consider what further engagement can be advanced with REALTORS® to enhance their ability to communicate with home buyers and sellers about the benefits of energy efficient homes.
 - b) A recommendation has been made to the BC Home Energy Coach program to provide a webinar introducing the program to REALTORS®.
 - c) BC Hydro and FortisBC should be involved in discussions about potential future opportunities for educating REALTORS® about energy efficiency programs for existing home retrofits and efficient new construction.

Appendix 1: Building Inspector Workshop

Workshop Agenda

THE BC ENERGY STEP CODE IMPLEMENTATION WORKSHOP (PART 9 BUILDINGS)

Audience: Municipal Building Inspectors in the Capital Region

Date: November 6, 2017

Location: Olympic View Golf Club

What You Will Learn:

The **BC Energy Step Code** is a voluntary provincial standard enacted in April 2017 that provides an incremental and consistent approach to achieving more energy-efficient buildings that go beyond the requirements of the base BC Building Code. It does so by establishing a series of measurable, performance-based energy-efficiency requirements for construction that builders can choose to build to, and (as of December 15, 2017) communities may voluntarily choose to adopt in bylaws and policies.

The **BC Energy Compliance Report for Part 9 Buildings** provides a standardize report template for Part 9 buildings complying with subsection 9.36.5 and 9.36.6 of the BC Building Code. The compliance report may be used by:

- EnerGuide Rating System (ERS) energy advisors and other energy modellers to produce a standardized compliance report.
- Local governments to verify builders are complying with a bylaw or policy.
- Local governments and utilities to process incentives or rebates that maybe aligned with EnerGuide Rating System (ERS) or BC Energy Step Code metrics.

This workshop will provide:

- An introduction to the purpose and vision of the BC Energy Step Code.
- A detailed review of the energy efficiency metrics for the BC Energy Step Code.
- An explanation of the roll of EnerGuide Rating System energy advisors and other service providers in verifying compliance with the BC Energy Step Code.
- A working session on using the BC Energy Compliance Report – Part 9 Buildings for buildings complying with subsection 9.36.5 or 9.36.6 of the BC Building Code.
- Update on Part 3 compliance reporting (if available)

Presenters:

- City Green Solutions: Peter Sundberg and Zhi Chen
- Capital Regional District: Nikki Elliott

About the Presenters:

City Green Solutions is a non-profit organization that provides energy efficiency services and programs for government and utilities. City Green is a licensed Service Organization for the EnerGuide Rating System for new and existing homes, the chair of the Natural Resources Canada ENERGY STAR for New Homes Technical Advisory Committee and on the Executive of the Home Performance Stakeholder Council. City Green has actively contributor to the development of the BC Energy Step Code and was contracted to develop the BC Energy Step Code Compliance Report for Part 9 Buildings.

Workshop Attendance

Attendance

Participants (32 staff, 4 presenters, 2 staff) = **38**

Local Governments in the Capital Region = **11**

Province= **1**

Organization	Representatives
Central Saanich	3
Colwood	1
Electoral Areas (CRD)	7
Esquimalt	Regrets
Highlands	Regrets
Langford	3
Metchosin	Regrets
North Saanich	Regrets
Oak Bay	2
Saanich	6 (including 1 presenter)
Sidney	3
Sooke	Regrets
Victoria	7 (including 1 presenter)
View Royal	1
CRD Climate Action	2 (Presenter, Staff)
City Green Solutions	2 (Presenter, Staff)
BC Building Safety and Standards Branch	1

Appendix 2: Elected Officials and Senior Staff Workshop:

Workshop Agenda

INTRODUCTION TO THE BC ENERGY STEP CODE, WITH ENERGY EFFICIENT BUILDING WALKING AND BUS TOUR

Audience: Municipal Elected Officials and Senior Staff

Date/Time: November 10, 2017 @ 12:30pm to 4:00pm.

Location: CRD Headquarters, Commons Room

Format: Presentation with Q&A and guided tour of energy efficient buildings and homes.

Lunch and Refreshments: Arrive at 12:30 for working lunch and refreshments.

What you will learn:

In April 2017, the Province of British Columbia adopted the BC Energy Step Code as regulation. The new standard is a tool designed to help both governments and industry chart a course to a future in which all new construction across the province is 'net-zero-energy ready' by 2032.

Attend this interactive session to:

- Hear from Andrew Pape-Salmon, the Executive Director of the Building and Safety Standards Branch about the purpose and vision of the BC Energy Step Code.
- Network and ask questions of industry and government staff representatives from the BC Building and Safety Standards Branch, the City of Victoria, Capital Regional District, District of Saanich, Passive House Canada, Canadian Home Builders Association Victoria, City Green Solutions.
- Hear a brief overview of industry and stakeholder feedback received to date
- Understand other green building standards and how they relate to the BC Energy Step Code
- Participate in a walking and bus tour of an energy efficient building and home:
 - Part 3 (Commercial) Building:
 - Tour: 1515 Douglas Street, Jawl Properties, Ltd
1515 Douglas Street is a six storey class AA LEED Platinum office and retail building located across from Victoria City Hall showcasing thoughtful architecture and urban design.
 - Part 9 (Residential) Building:
 - Tour: 235 Montreal Street, Interactive Construction Inc.
 - Tour: 734 Mary Street, Bernhardt Contracting
 - Drive By: 860 Queens Ave, North Park Passive House, Bernhardt Contracting

Presenters:

- Andrew Pape-Salmon, Executive Director, Building and Safety Standards Branch
- Facilitator: Peter Sundberg, City Green Solutions and Nikki Elliott, CRD
- Home/Building Tour Presenters:
 - Mark Bernhardt: Bernhardt Contracting
 - Russ Barry: Interactive Construction Inc
 - Robert Jawl: Jawl Properties
 - Erica Sangster: D'Ambrosio Architecture + Urbanism
 - Andy Chong: Integral Group.

Workshop Attendance

Attendance

Participants (24 Elected Officials and Senior staff, 7 presenters, 2 staff) = 25

Local Governments in the Capital Region = 10

Province= 1

First Nations = 2

Organization	Representatives
Central Saanich	1
Colwood	2
Esquimalt	Regrets
Highlands	Regrets
Juan de Fuca Electoral Area	Regrets
Langford	2
Metchosin	1
North Saanich	1
Oak Bay	2
Saanich	4 (including 1 presenter)
Salt Spring Island Electoral Area	Regrets
Sidney	2
Songhees Nation	3
Sooke	Regrets
Southern Gulf Islands Electoral Area	Regrets
Tsawout First Nation	1
Victoria	2 (including 1 presenter)
View Royal	1
CRD	4 (including 1 presenter and 2staff)
City Green Solutions	1 (Presenter)
BC Building Safety and Standards Branch	1 (Presenter)
CHBA / Passive House Canada/ Builder	2 (Presenter, facilitator)
City Green Solutions	1 (Presenter)

Appendix 3: Local Government Policy and Implementation Workshop

Workshop Agenda

WORKING SESSION ON BC ENERGY STEP CODE POLICY & IMPLEMENTATION

Audience: Local government officials

Date/Time: November 30, 2017 @ 10:30am to 2:00pm

Location: Cedar Hill Golf Course Club House

In April 2017, the Province of British Columbia adopted the BC Energy Step Code as regulation. The new standard is a tool designed to help both governments and industry chart a course to a future in which all new construction across the province is 'net-zero-energy ready' by 2032. This working session will:

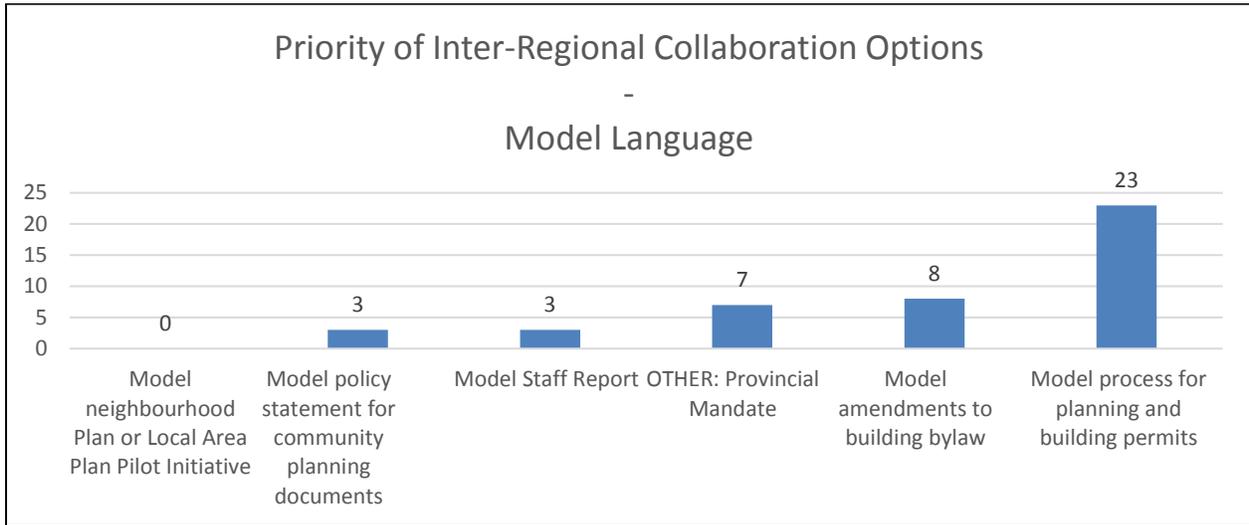
- Provide a local government perspective (New Westminster, Victoria, Saanich) on preparing to implement the BC Energy Step Code
- Review a range of options and opportunities for encouraging, incentivizing or adopting the BC Energy Step Code
- Summarize the local government planned adoption of the BC Energy Step Code (as of date of workshop)
- Summarize the range of industry and stakeholder positions on the BC Energy Step Code
- Introduce and summarize the BC Energy Step Code – A Best Practices Guide for Local Governments
- Introduce the BC Energy Compliance Report – Part 9 Buildings
- Facilitate a working discussion on barriers, policy considerations, training needs, implementation options, regional collaboration, task leaders and timelines
- Provide opportunities to ask questions on the BC Energy Step Code

10:30 - 10:40 AM	WELCOME, INTRODUCTION, REVIEW OF WORKING SESSION OBJECTIVES
10:40 - 11:50 AM	<p>PRESENTATION: INTRODUCTION TO CRD PROGRAM & THE BC ENERGY STEP CODE</p> <ul style="list-style-type: none"> ○ Speaker: Nikki Elliott, CRD Climate Action Program ○ Speaker: Peter Sundberg, Executive Director City Green, BC Energy Step Code Technical Sub-Committee <p>PRESENTATION: LOCAL GOVERNMENT PERSPECTIVES: THE BC ENERGY STEP CODE</p> <ul style="list-style-type: none"> ○ Speaker: Norm Connolly, Community Energy Manager - City of New Westminster, BC Energy Step Code Council Member & Co-Chair of the Technical Sub-Committee ○ Speaker: Nikki Elliott, CRD Climate Action Program – Overview of Regional Building Industry Feedback Received to Date ○ Speakers: Rebecca Newlove, District of Saanich and Devon Miller, City of Victoria - Overview of BC Energy Step Code Policy Considerations and Timelines.
	WORKING LUNCH SERVED
12:10 - 12:30 PM	<p>PRESENTATION: SUMMARY OF A BEST PRACTICES GUIDE FOR LOCAL GOVERNMENTS & INTRODUCTION TO THE BC ENERGY COMPLIANCE REPORT - PART 9 BUILDINGS</p> <ul style="list-style-type: none"> ○ Speaker: Peter Sundberg
	FACILITATED BREAK-OUT GROUP QUESTIONS AND DISCUSSION
12:30 - 1:50 PM	<p>Attendees were given the opportunity to identify and discuss a number of topics related the BC Energy Step Code in their community. Topics included: barriers, training, compliance, processes, incentives and readiness. Attendees then participated in an exercise to identify priority areas for regional coordination. Results are below.</p> <ul style="list-style-type: none"> ○
1:50 PM	CLOSING STATEMENTS

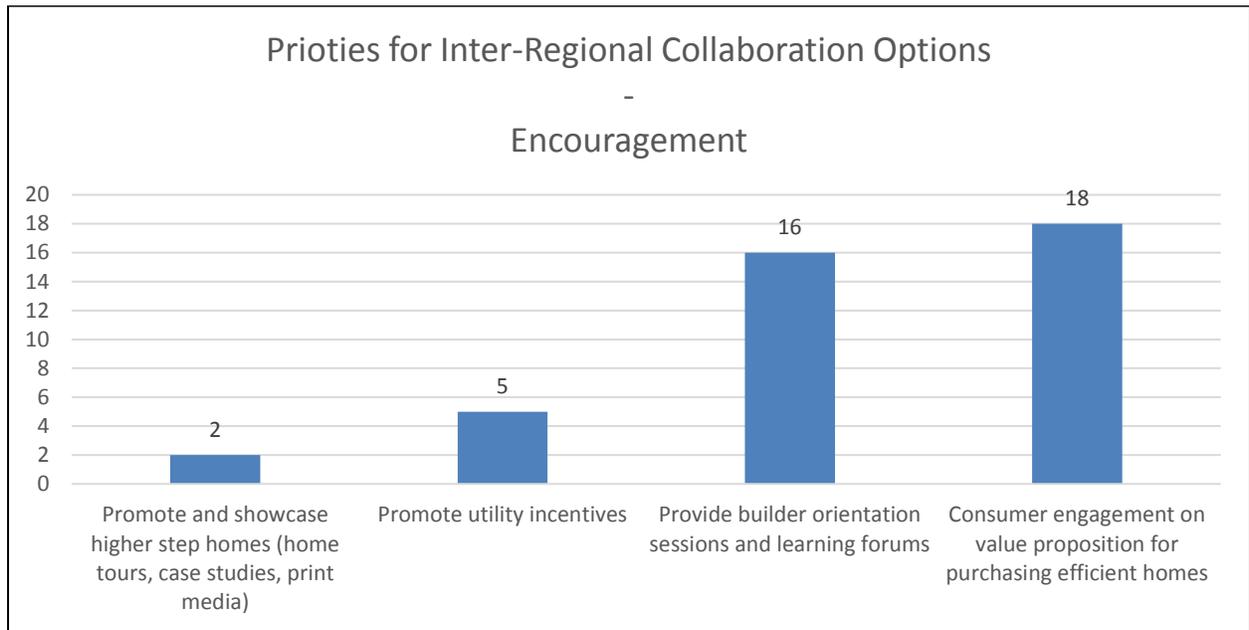
Workshop Break-Out – Ranking and Prioritizing Answers for Regional Collaboration Opportunities

Participating staff were provided with two sticky dots for each Break-Out Category (for example Model Language). They were asked to stick the dots in the line item that they felt was most important or had the highest level of priority. If an option was not provided they were asked to write in a new option in the ‘other’ row. All numbers represent a sticky dot vote.

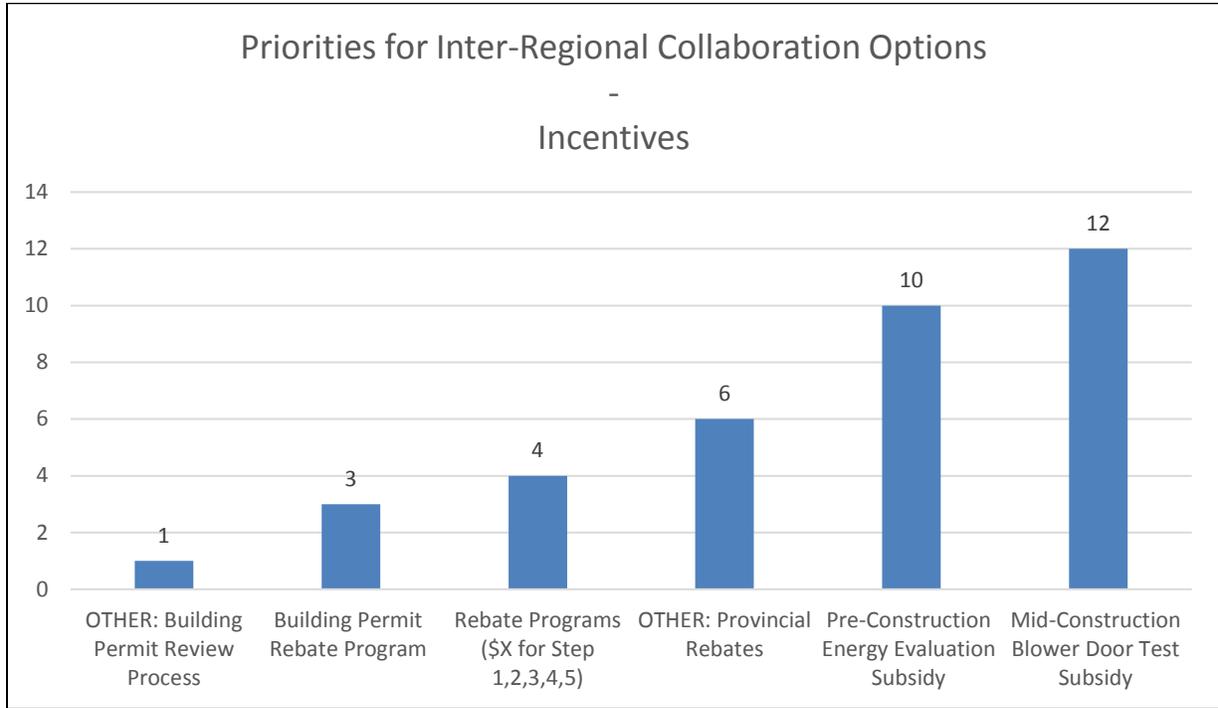
Category 1 – Model Language



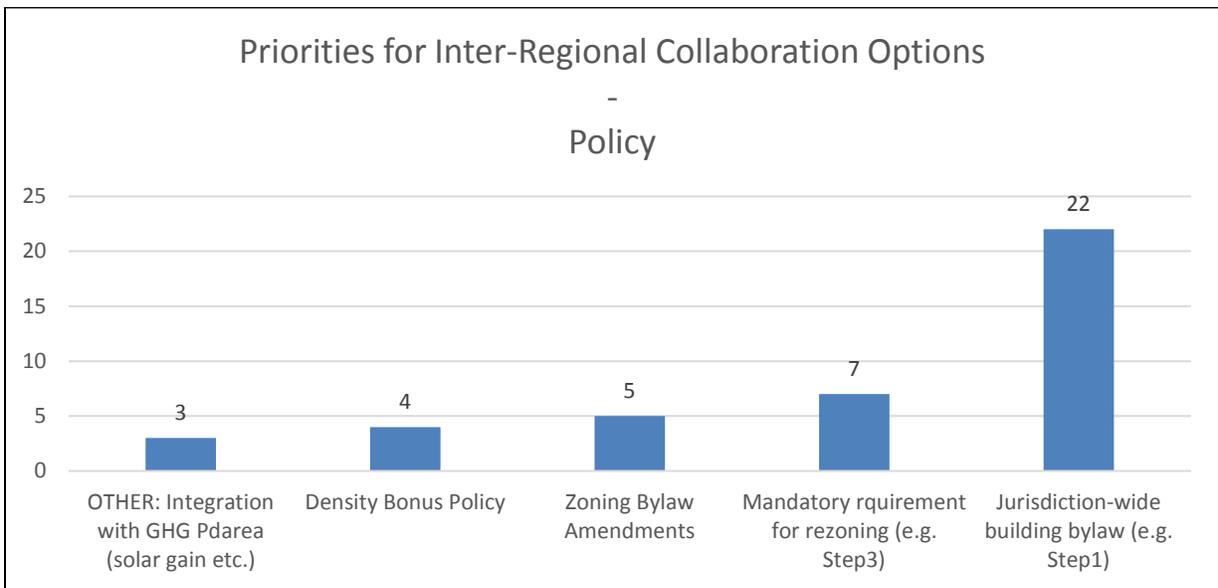
Category 2 – Encouragement



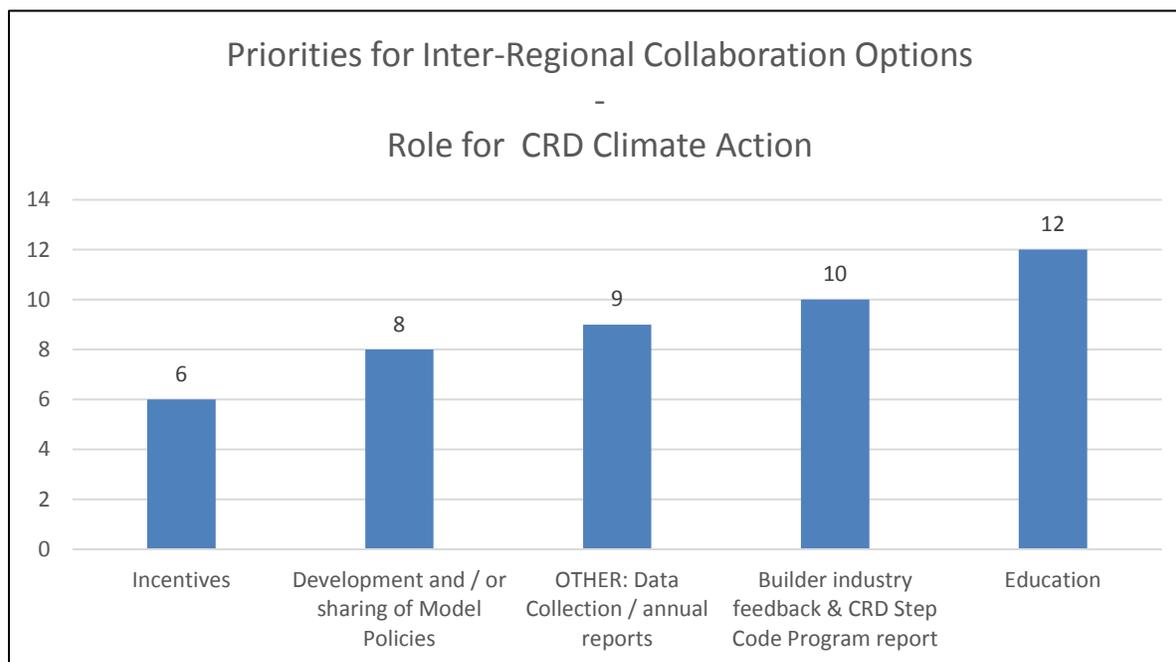
Category 3 – Incentives



Category 4 – Policy



Category 5 – Role for CRD Climate Action



Workshop Attendance

Participants (29 staff, 3 presenters, 2 staff) = **31**

LGs in the Capital Region = **13**

Organization	Representatives
Central Saanich	2
Colwood	Regrets
Electoral Areas (CRD)	2
Esquimalt	1
Highlands	Regrets
Juan de Fuca Electoral Area (CRD)	3
Langford	3
Metchosin	1
North Saanich	1
Oak Bay	2
Saanich	3
Salt Spring Island Electoral Area	1
Sidney	2
Sooke	Regrets
Victoria	2
View Royal	2
Cowichan Valley Regional District	1
City of New Westminster	1 (presenter)
CRD Climate Action	2 (1 presenter and 1 staff)
City Green Solutions	2 (1 presenter and 1 staff)

Appendix 4: REALTORS® Selling the Benefits of Efficient Homes Workshop & Tour

Workshop Agenda

SELLING THE BENEFITS OF ENERGY EFFICIENT HOMES, WITH ENERGY EFFICIENT HOME BUS TOUR

Date/Time: December 8th

Location: Victoria Real Estate Board

Format: 1 Hour Presentation and Discussion/2 Hour Bus Tour of Energy Efficient Homes

Attend this interactive session to:

- Learn how to explain and sell the features and benefits of energy efficient products and homes in easy to understand language for home buyers and sellers.
- Selling a fixer upper? Learn how to connect home buyers with all the current home energy improvement rebates, including CMHC and Genworth Mortgage Loan Insurance rebates, and community-specific rebates throughout the Capital Region.
- Learn about the full value of an energy evaluation for home buyers and sellers. Learn about what happens in an energy evaluation, how to read a home energy label and how to help your clients find an energy advisor.
- Learn what the BC Energy Step Code is and how to explain it to home buyers in the market for a new home.
- Participate in bus tour of energy efficient homes:
 - **Net-Zero Retrofit Home in Vic West:** See an 1890's home that has been retrofitted to achieve Net Zero Energy Use. Retrofit measures include: high performance windows R6; insulation upgrades; air sealing; mini split heat pump for heating; heat pump for domestic hot water, and a 4.2 kW solar photovoltaic system
 - **New Construction Passive House Duplex in Quadra/Hillside:** See a newly constructed home built to Passive House Standards.

Presenters:

- Peter Sundberg, City Green Solutions
- Jack Meredith, Homeowner
- Reed Cassidy: Adapt Energy Advising

Workshop Attendance

Attendance

Participants (31 REALTORS, 2 presenters, 3 tours guides; 1 staff) = **37**

Community Builders...

Building Communities

November 2, 2017

Dear CRD Chair and Board,

RE: Update on BC Step Code

Following our letter of September 14, Re: **Step Code Survey to VRBA Members**, the Ministry of Municipal Affairs and Housing released a report on the costs of the Step Code.

The report is not credible when compared to our own survey of 22 experienced builders, including Built Green, Passive Home and Net Zero contractors. For example, the ministry estimates a Tier 5 (Passive Home) will cost only an additional \$17,450 over a base code home.

Our builders estimate the additional cost to be between \$55,410 and \$110,820 and in this environment of weekly rising prices for material and labour, the number is likely to be on the higher side. Given this disparity between the report and real world construction costs, the report should be disregarded for any Tier.

In addition, when council asks for the designations of Built Green, Leed, or Passive Home, the contractors must be registered with the program and have certified education to deliver that specific product. Education is the foundation of professionalism and helps protect your residents and municipality.

There is no certified education for the Step Code. While the ministry claims it will provide seminars for the Step Code, attendance by builders is optional.

The Step Code is poor policy increasing costs and risk while undermining certified education programs and National Building Code diligence.

In addition, there is negligible benefit reducing GHG's at significant cost in already energy efficient new homes. Our older housing stock is where real energy efficiency gains can be achieved.

For these reasons and others, including the real potential for unintended consequences, VRBA does not support the Step Code at any level. We recommend support for Built Green, a very successful certification program that includes energy efficiency, water conservation, recycling and *affordability – critical for young families in BC.*

You can find more information on the Step Code at our website <http://www.vrba.ca/need-know-bc-step-code/>. Feel free to contact me for any additional information.

Yours sincerely,



Casey Edge
Executive Director

cc Honourable John Horgan, Premier of British Columbia
cc Honourable Selina Robinson, Minister of Municipal Affairs and Housing
cc CRD municipalities

Dear Mayor and Council:

On behalf of Canadian Home Builders' Association of Vancouver Island, I am writing to offer our support for your upcoming consultations on the new B.C. Energy Step Code.

CHBA Vancouver Island represents home builders, developers, renovators, suppliers and other industry professionals. We work to raise the bar of professionalism in the industry, and advocate for affordability, quality, and choice for consumers.

CHBA BC was a key participant in creation of the B.C. Energy Step Code and remains a member of the technical committee. We now wish to continue that partnership at the local level and work collaboratively with local governments on implementation. We are prepared to be an active partner, with an industry perspective, and provide valuable input on behalf of members to inform capacity, costs, and training gaps that may exist during implementation on Step Code.

We believe it is critical for representatives of the industry to be part of the consultation. Please let us know who would be the best contact for this. We look forward to discussing this opportunity in greater detail.

Sincerely,



Mark Bernhardt B.Sc.
Incoming President,
On behalf of CHBA Vancouver Island

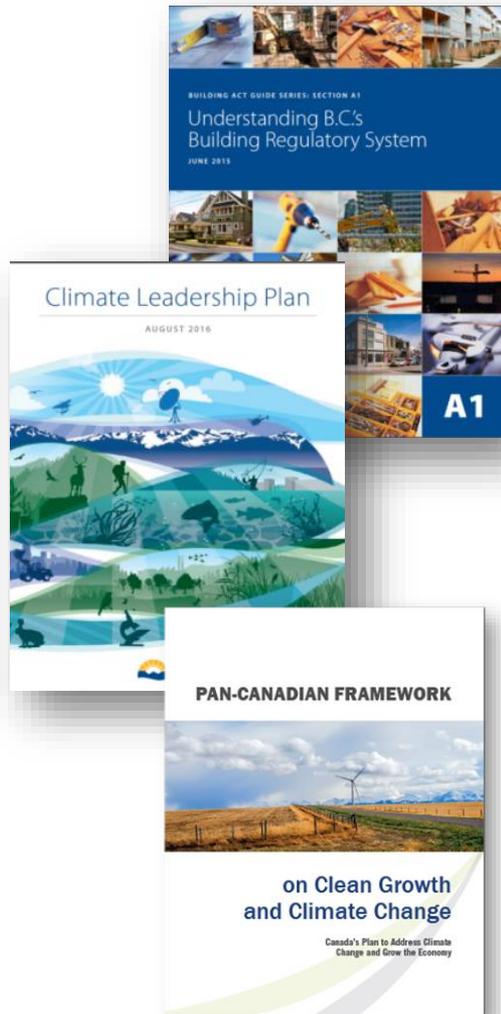
CHBA VI Contact Information
Phone 250-755-1366
170 Wallace Street,
Nanaimo, BC
V9R 5B1

CRD Energy Step Code Program

CRD Environmental Services Committee
February 10, 2018



About the BC Energy Step Code

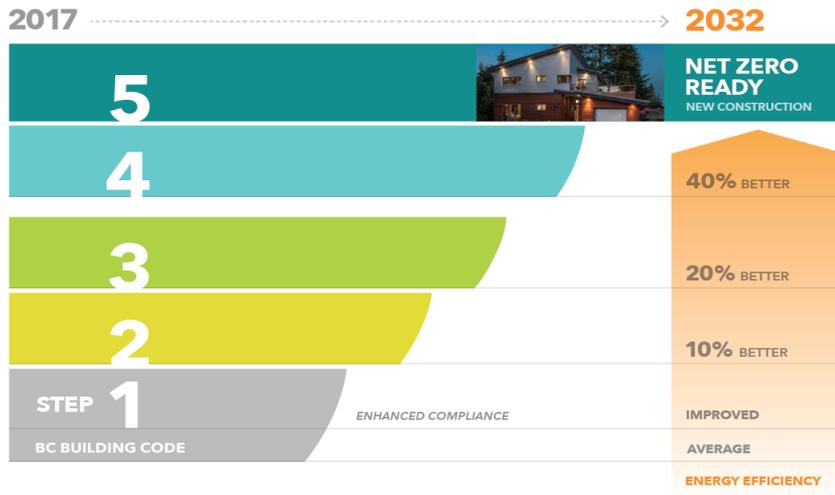


- Offers a common standard for achieving building energy goals for **new buildings**
- Aligns with provincial and national targets
- Supports regional and local climate goals
- Performance based (vs prescriptive)
- **Voluntary compliance path within BC Building Code:**
 - for use by builders/property owners
 - to connect to incentive programs
 - for adoption in local government bylaws and policies
- Energy Step Code Council provides guidance and resources

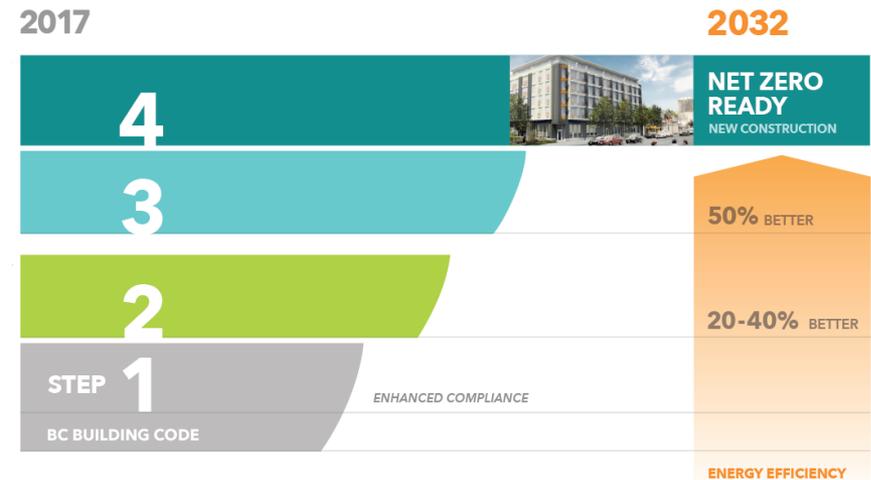
About the BC Energy Step Code



Part 9 (houses and small buildings)



Part 3 (wood frame and concrete residential)



- Step 1 - current BC Building Code via performance path
- Lower Steps (2/3) - use conventional materials and building techniques (many builders already building to this level as a baseline)
- Upper Steps (4/5) - may require innovative materials and building practices



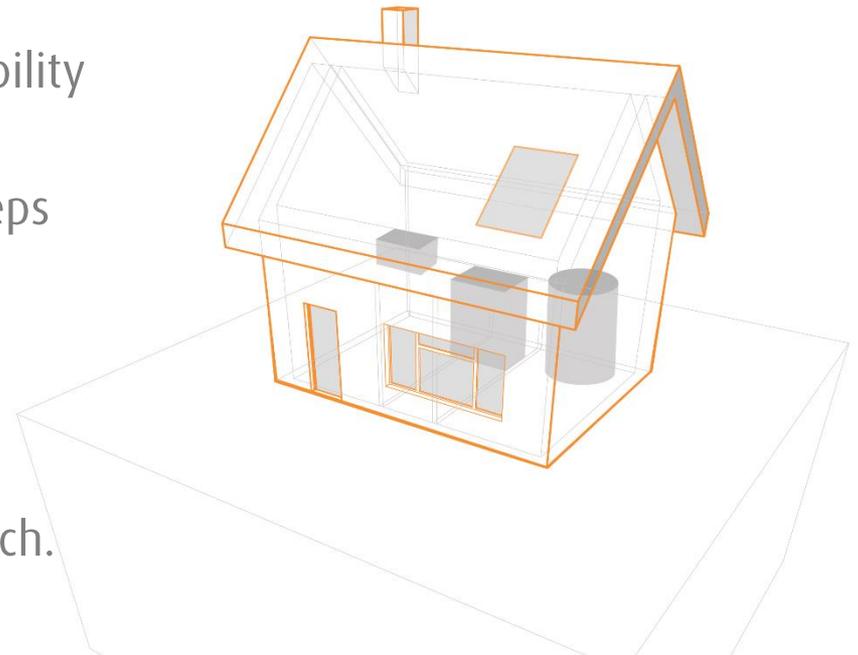
Components - Outreach:

- CRD Building Industry Survey
- Presentation for CRD Housing Action Team
- Workshops & Working Sessions
 - Building Industry (feedback)
 - Elected Official and Senior Staff (building tour)
 - Building Inspectors (compliance reporting)
 - Local government staff (Step Code policy)
 - REALTORS™ ('Selling Energy Efficiency')
- Development of energy literacy materials
- Participation in inter-regional networks
- Support through CRD Climate Action IMWG and directly to municipalities and others, as required.

Building Industry Survey & Workshop

- 81% of builders have worked in >1 municipality
- 62% of Part 9 respondents have used an energy model (80% for Part 3)
- Desire for regional consistency of policies and processes
- Further training and education
- Increased public awareness
- Quality control and minimize risk and liability
- Incentives for adoption
- Cost implications, especially at higher steps
- Lower steps are achievable today
- Range of views on which step to adopt

- REALTORS™ - Interested in home energy.
Resource for education and public outreach.





Local Government Workshops

- High level of interest in learning about the Step Code
- Ongoing engagement is needed (internal and external)
- Need to streamline processes
- Confirm market availability of local energy advisors
- Clear understanding of responsibilities re: third parties
- High level interest in regional collaboration (where possible)
 - CRD CAP and CRD Climate Action IMWG can continue to play a role

Intent to consult industry:

- City of Surrey
- City of Richmond
- City of North Vancouver
- City of Campbell River
- City of Duncan
- District of North Vancouver
- **City of Victoria**
- **District of Saanich**
- District of North Saanich
- Comox Valley Regional District
- Resort Municipality of Whistler
- District of West Vancouver

Recent endorsement by Councils to co-engage industry starting in February 2018 to inform potential implementation approach. Focus on Step 1 starting late 2018, Step 2/3 in early 2020 and potential rebate programs.

Next Steps

CRD

- For consideration in their own local government policies / programs:
 - Share initial building industry feedback
 - Share results of local government workshops
- Through CRD Climate Action IMWG:
 - Share any future municipal / electoral area Step Code related policies, procedures and learnings amongst group
 - Identify & execute additional education opportunities
 - Provide public education materials
 - Continue to support regional building-related energy and GHG reduction projects

